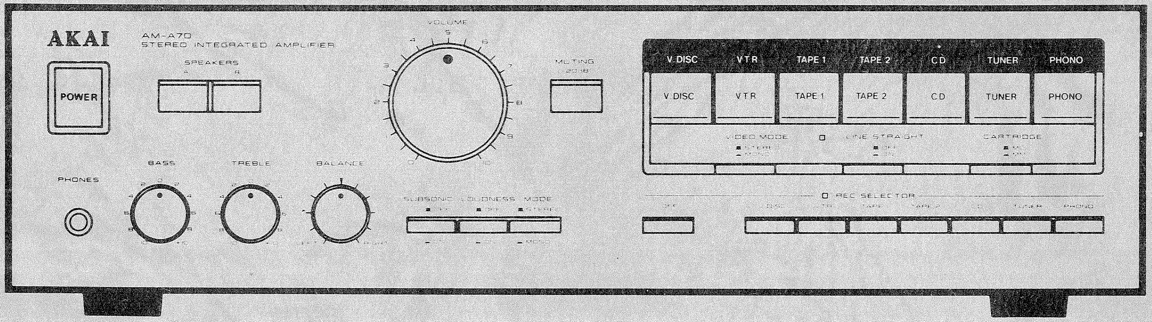
AKAI SERVICE MANUAL


AKAI
AM-A70
STEREO INTEGRATED AMPLIFIER
POWER
SPEAKERS
A
B
VOLUME
MUTING
V.DISC
VTR
TAPE 1
TAPE 2
CD
TUNER
PHONO
VIDEO MODE
LINE STRAIGHT
CARTRIDGE
PHONES
BASS
TREBLE
BALANCE
SUBSONIC
LOUDNESS
MODE
REC SELECTOR

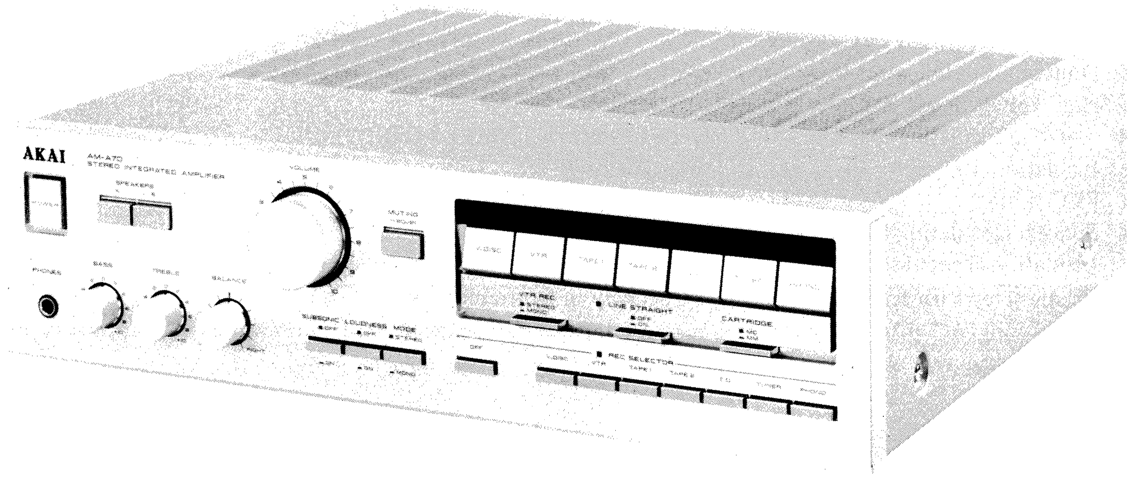
STEREO INTEGRATED AMPLIFIER

MODEL AM-A70

ABBREVIATIONS FOR SERVICE MANUAL

MODEL AM-A70

ABBREVIATIONS	EXPLANATION
AC	Alternating Current
AMP	AMPlifier
CD	Compact Disc
DC	Direct Current
GND	GrouND
MC	Moving Coil
MM	Moving Magnet
PCB	Printed Circuit Board
REC	RECord
SW	SWitch
V.DISC	Video DISC
VR	Variable Resistance
VTR	Video Tape Recorder


AKAI
AM-A70
STEREO INTEGRATED AMPLIFIER
SPEAKERS
VOLUME
MUTING
PHONES
BASS
TREBLE
BALANCE
SUBSONIC
LOUDNESS
MODE
VTR REC
LINE STRAIGHT
CARTRIDGE
REC SELECTOR

STEREO INTEGRATED AMPLIFIER

MODEL AM-A70

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SECTION 2 PARTS LIST 11

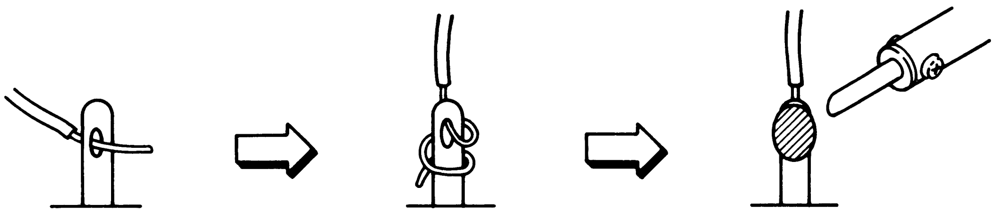
SAFETY INSTRUCTIONS

SAFETY CHECK AFTER SERVICING

Confirm the specified insulation resistance between power cord plug prongs and externally exposed parts of the set is greater than 10 Mohms, but for equipment with external antenna terminals (tuner, receiver, etc.) and is intended for $\boxed{C}$ or $\boxed{A}$, specified insulation resistance should be more than 2.2 Mohms (ground terminals, microphone jacks, headphone jacks. line-in-out jacks etc.)

PRECAUTIONS DURING SERVICING

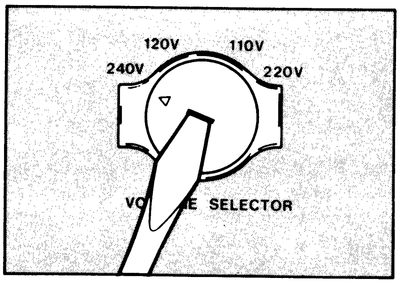
1. Parts identified by the ⚠ symbol parts are critical for safety.
   Replace only with parts number specified.
2. In addition to safety, other parts and assemblies are specified for conformance with such regulations as those applying to spurious radiation. These must also be replaced only with specified replacements.
   Examples: RF .converters, tuner units, antenna selector switches, RF cables, noise blocking capacitors, noise blocking filters, etc.
3. Use specified internal wiring. Note especially:
   1) Wires covered with PVC tubing
   2) Double insulated wires
   3) High voltage leads
4. Use specified insulating materials for hazardous live parts. Note especially:
   1) Insulation Tape
   2) PVC tubing
   3) Spacers (Insulating Barriers)
   4) Insulation sheets for transistors
   5) Plastic screws for fixing microswitch (especially in turntable)
5. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.), wrap ends of wires securely about the terminals before soldering.



6. Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.).
7. Check that replaced wires do not contact sharp edged or pointed parts.
8. Also check areas surrounding repaired locations.
9. Use care that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

VOLTAGE CONVERSION

Models for Canada, USA, Europe, UK and Australia are not equipped with this facility. Each machine is preset at the factory according to destination, but some machines can be set to 110V, 120V, 220V, or 240V as required.
If your machine's can be converted:
Before connecting the power cord, turn the VOLTAGE SELECTOR located on the rear panel with a screwdriver until the correct voltage is indicated.



SECTION 1

SERVICE MANUAL

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III. CONTROLS 6
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For basic adjustments, measuring methods, and operating principles, refer to GENERAL TECHNICAL MANUAL.

I. SPECIFICATIONS

POWER AMPLIFIER SECTION

RATED POWER OUTPUT	8 ohms	4 ohms
20Hz to 20kHz	100W/0.5%	150W/0.7%
POWER OUTPUT (by FTC) 20Hz to 20kHz	100W/0.5%	150W/0.7%
DIN 1kHz	110W/0.7%	
POWER BANDWIDTH (IHF –3dB, 8 ohms)	10Hz to 80kHz (1.0%)	
S/N (IHF-A)		
PHONO (MM)	86dB	
PHONO (MC)	67dB	
CD/AUX	100dB	
RESIDUAL NOISE (8 ohms)	0.5mV	
CHANNEL SEPARATION (IHF, 1kHz)	60dB	
DAMPING FACTOR (1kHz, 8 ohms)	30	
REQUIRED SPEAKER IMPEDANCE		
FOR USA, CANADA and EUROPE (EXCEPT UK and FRG)	A or B: 6 to 16 ohms	
	A and B: 12 to 16 ohms	
FOR UK, FRG, AUSTRALIA and OTHER COUNTRIES	A or B: 4 to 16 ohms	
	A and B: 8 to 16 ohms	

PRE AMPLIFIER SECTION

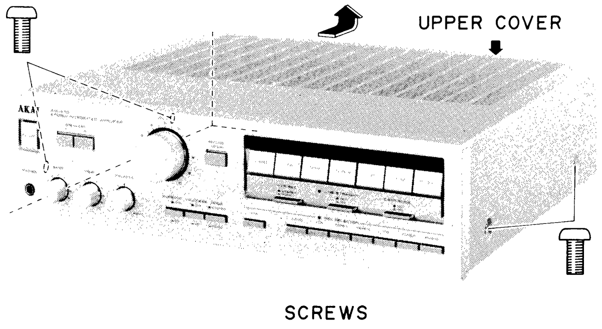
VIDEO SECTION	
INPUT SENSITIVITY/IMPEDANCE	
VTR	1Vp-p/75 ohms
V. DISC	1Vp-p/75 ohms
OUTPUT LEVEL/IMPEDANCE	1Vp-p/75 ohms
AUDIO SECTION	
INPUT SENSITIVITY/IMPEDANCE	
PHONO (MC)	0.2mV/100 ohms
PHONO (MM)	2.0mV/47k ohms
CD/AUX	150mV/47k ohms
TUNER	150mV/47k ohms
TAPE	150mV/47k ohms
VTR (AUDIO)	150mV/47k ohms
V. DISC (AUDIO)	150mV/47k ohms
OUTPUT LEVEL/IMPEDANCE	
TAPE REC	150mV/1k ohms
FREQUENCY RESPONSE	
PHONO (RIAA DEVIATION)	±0.2dB
TUNER, CD/AUX, TAPE	5Hz to 100kHz (–3dB)
TONE CONTROL	
BASS	±8dB
TREBLE	±8dB
SUBSONIC FILTER	–3dB (at 18Hz)
PHONO MAX. INPUT LEVEL	
MC	25mV
MM	250mV
POWER REQUIREMENTS	120V, 60Hz for USA & Canada 220V, 50Hz for Europe except UK 240V, 50Hz for UK & Australia 110V/120V/220V/240V, 50Hz/60Hz convertible for other countries
DIMENSIONS	440(W) x 120(H) x 410(D)mm (17.3 x 4.7 x 16.1 inches)
WEIGHT	11.5kg (25.4 lbs)

* For imprvement pruposes, specifications and design are subject to change without notice.

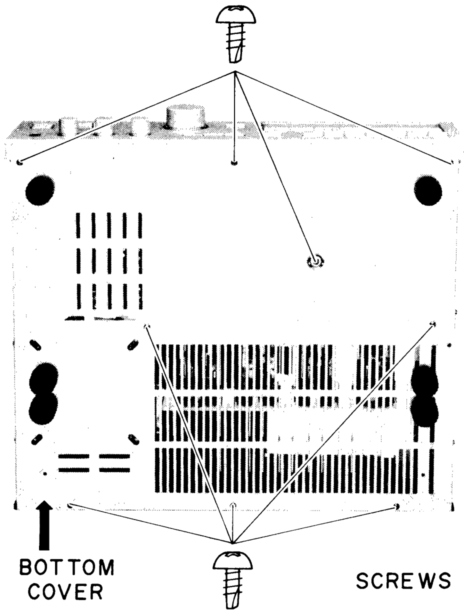
II.DISMANTLING OF UNIT

In case of trouble, etc. necessitating dismantling, please dismantle in the order shown in the photographs. Reassemble in reverse order.

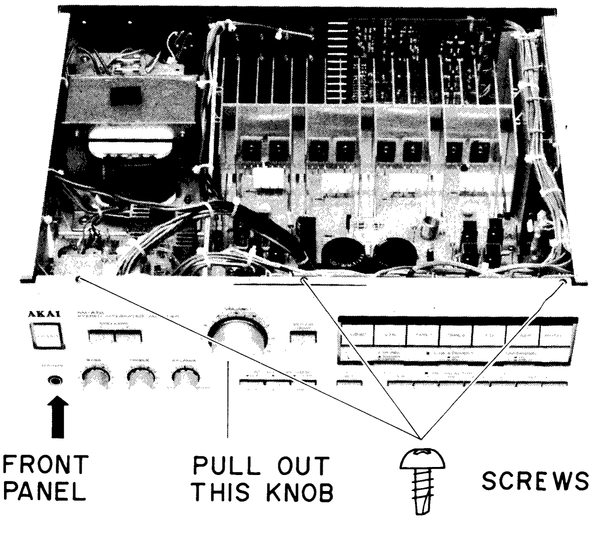
1


UPPER COVER
SCREWS

2


BOTTOM COVER
SCREWS

3


FRONT PANEL
PULL OUT THIS KNOB
SCREWS

III. CONTROLS

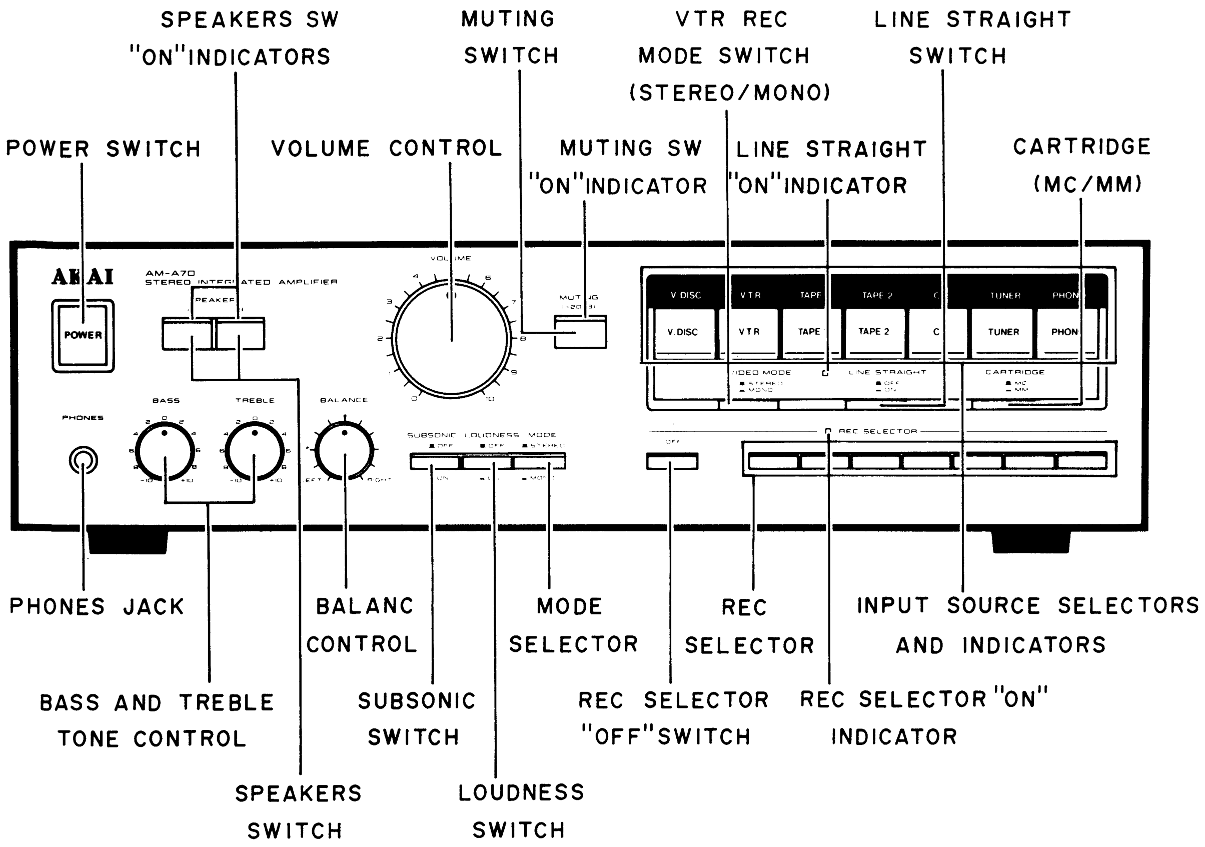

SPEAKERS SW "ON"INDICATORS
MUTING SWITCH
VTR REC MODE SWITCH (STEREO/MONO)
LINE STRAIGHT SWITCH
POWER SWITCH
VOLUME CONTROL
MUTING SW "ON"INDICATOR
LINE STRAIGHT "ON"INDICATOR
CARTRIDGE (MC/MM)
AKAI
AM-A70 STEREO INTEGRATED AMPLIFIER
POWER
VOLUME
V.DISC
VTR
TAPE
TAPE 2
TUNER
PHONO
PHONES
BASS
TREBLE
BALANCE
SUBSONIC LOUDNESS MODE
REC SELECTOR
PHONES JACK
BALANC CONTROL
MODE SELECTOR
REC SELECTOR
INPUT SOURCE SELECTORS AND INDICATORS
BASS AND TREBLE TONE CONTROL
SUBSONIC SWITCH
REC SELECTOR "OFF"SWITCH
REC SELECTOR "ON" INDICATOR
SPEAKERS SWITCH
LOUDNESS SWITCH

Fig. 3-1 Front View

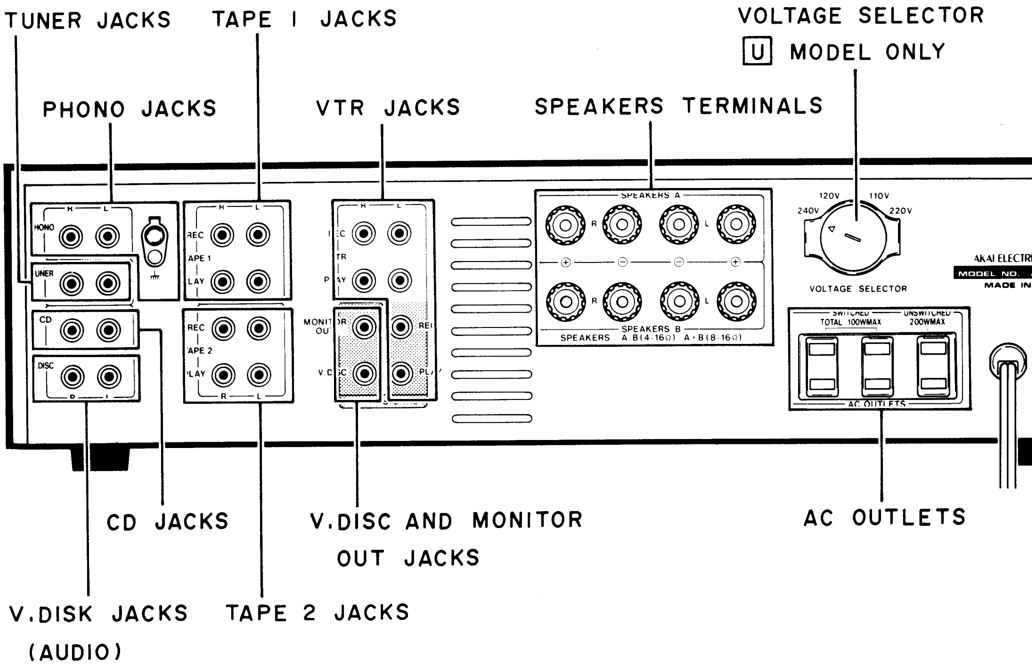

TUNER JACKS
TAPE I JACKS
VOLTAGE SELECTOR U MODEL ONLY
PHONO JACKS
VTR JACKS
SPEAKERS TERMINALS
SPEAKERS A
SPEAKERS B
120V
110V
240V
220V
VOLTAGE SELECTOR
AKAI ELECTRIC CO., LTD.
MODEL NO. AM-A70
MADE IN JAPAN
SWITCHED TOTAL 100WMAX
UNSWITCHED 200WMAX
AC OUTLETS
CD JACKS
V.DISC AND MONITOR OUT JACKS
AC OUTLETS
V.DISK JACKS (AUDIO)
TAPE 2 JACKS

Fig. 3-2 Rear View

IV. PRINCIPAL PARTS LOCATION

FUSE PCB
A2038A501B U
511B C.A
521B E.B.S
531B V

VOLTAGE SELECTOR
VS-901 U

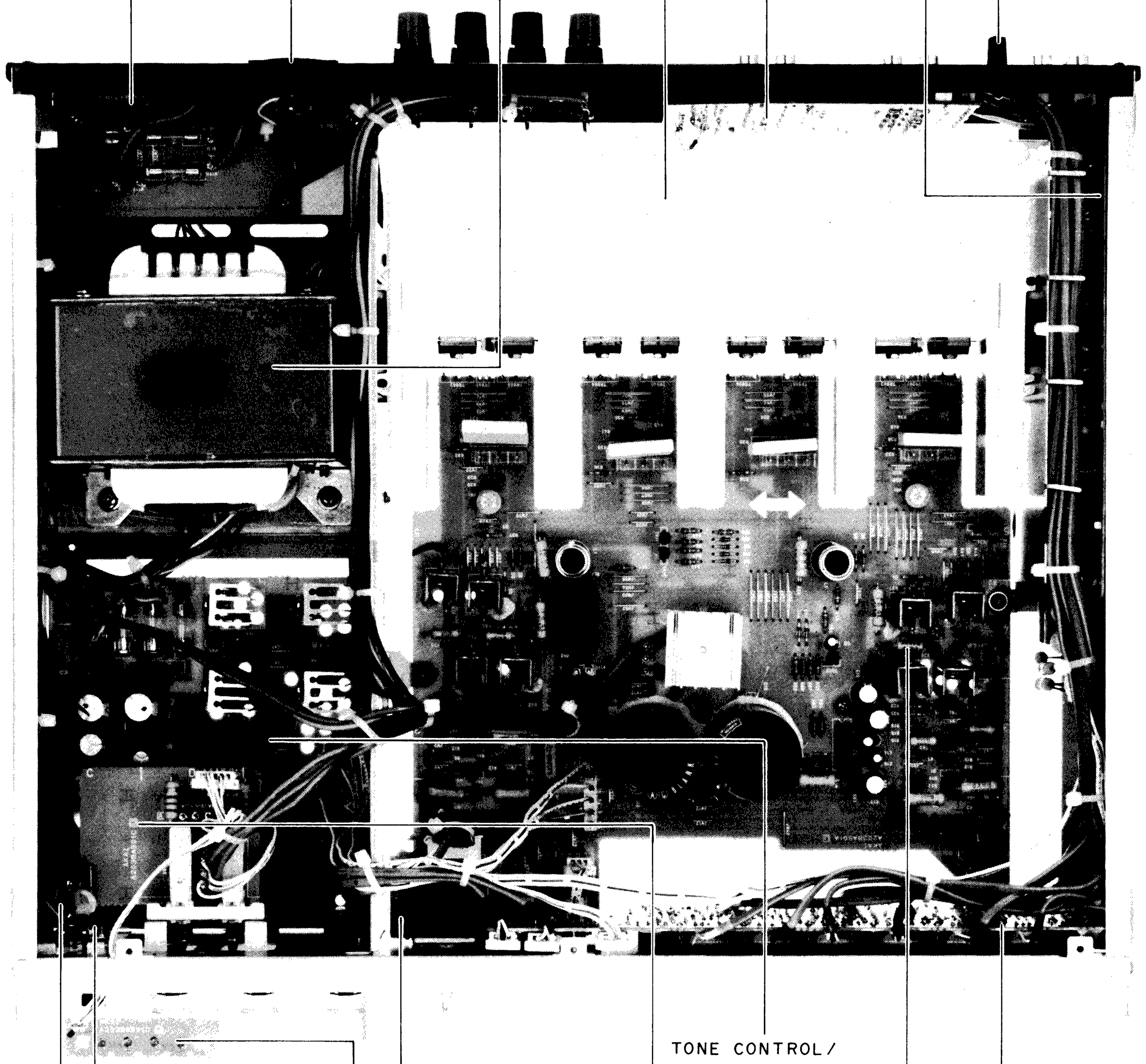
POWER
TRANSFORMER T901
AM-A70T-70 U
30 C.A
40 E
50 B.S
60 V

JACK PCB
A2037A523B U.E.B.S
513B C.A
533B V

HEAT SINK

PRE AMP PCB
A2037A502A U.C.A.E.B.S
512A V

GND TERMINAL
TM-901



PHONES PCB
A2038A502C U.C.A.E.B.S
512C V

VOLUME PCB
A2037A502D U.C.A.E.B.S
512D V

TONE CONTROL/
POWER SUPPLY PCB
A2037A523A U.E.B.S
513A C.A
533A V

SELECTOR PCB
A2037A502B U.C.A.E.B.S
512B V

POWER SWITCH
SW901

SPEKERS IND PCB
A2038A501D U
502D C.A
503D E.B.S
504D V

SPEKERS SELECTOR PCB
A2038A501C U
502C C.A
503C E.B.S
504C V

MAIN AMP PCB
A2038A501A U
502A C.A
503A E.B
504A V

Fig. 4-1

V. ADJUSTMENT

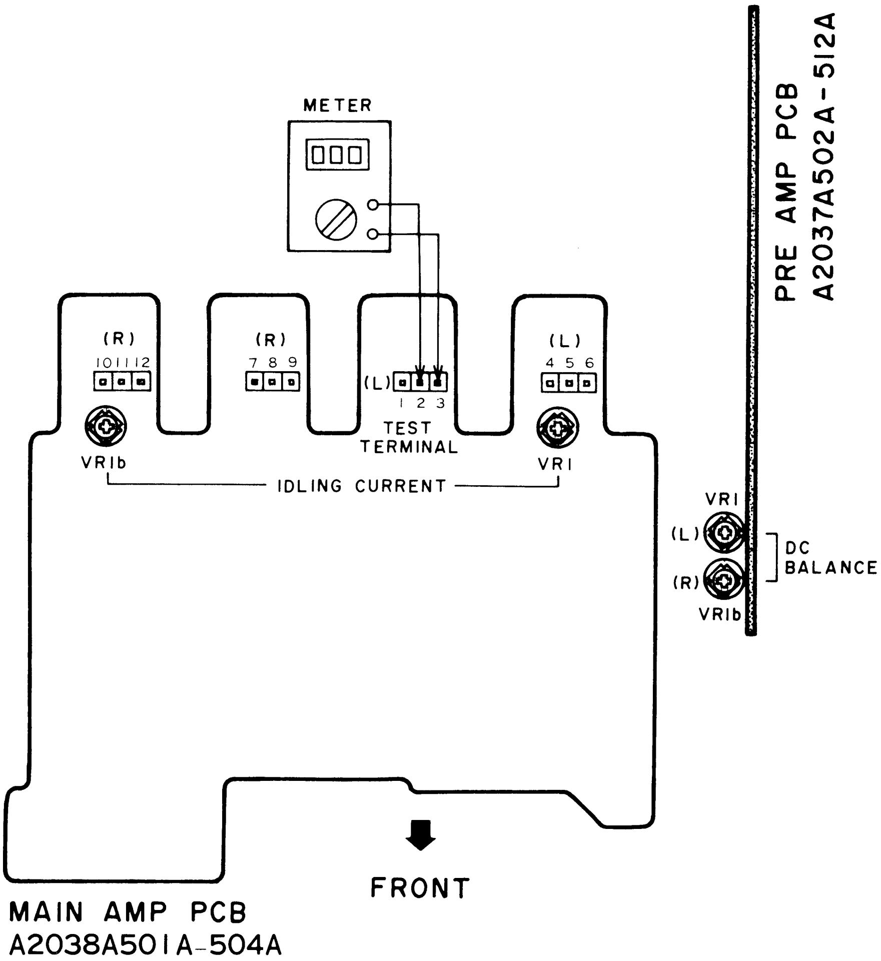

METER
(R)
10 11 12
(R)
7 8 9
(L)
1 2 3
TEST
TERMINAL
(L)
4 5 6
VR1b
VR1
IDLING CURRENT
VR1
(L)
(R)
VR1b
DC
BALANCE
FRONT
MAIN AMP PCB
A2038A501A-504A
PRE AMP PCB
A2037A502A-512A

Fig. 5-1

5-1. EQ AMP DC BALANCE ADJUSTMENT

1) Set the REC SELECTOR to PHONO (MM) mode.
2) Connect an Oscilloscope to TAPE REC OUT.
3) Adjust VR1 (on EQUALIZER PCB) so that the DC Voltage is less than 1mV DC.
4) Adjust VR_{1b} (R-ch) in the same manner as above.

5-2. IDLING CURRENT ADJUSTMENT

NOTE: This adjustment should be executed within 30 sec. after the power is turned on.

1) Connect a Digital Voltmeter DC range to the test terminal pin ① and ②, ② and ③, ④ and ⑤, ⑤ and ⑥ respectively, and measure the voltages (four voltages).
2) Connect the digital voltmeter to the test terminal in which the lowest voltage has been measured and adjust VR1 so that the voltage between the test terminal is 1.0mV DC.
(The maximum voltage between these test terminal should be less than 2mV DC.)
3) Adjust VR_{1b} (R-ch) in the same manner as above. (Use the test terminal pins ⑦ to ⑫ when measuring voltages for R-ch).

ATTENTION:

Precaution when replacing the power transistors (TR902 to TR905 and TR902b to TR905b). Make sure that to discharge the power supply voltage by connecting a resistor (100Ω/10W) between C13 pins (+ and –) and also between C12 pins (+ and –) after turn off the power for the safety and the protection of the transistors.

VI. PC BOARD TITLE AND IDENTIFICATIONS

PC BOARD TITLE	PC BOARD NUMBER	REMARKS
MAIN AMP PC BOARD	A2038A501A	U
	502A	C A
	503A	E B
	504A	V
SELECTOR PC BOARD	A2037A502B	U C A E B S
	512B	V
PRE AMP PC BOARD	A2037A502A	U C A E B S
	512A	V
TONE CONTROL/POWER SUPPLY PC BOARD	A2037A523A	U E B S
	513A	C A
	533A	V
JACK PC BOARD	A2037A523B	U E B S
	513B	C A
	533B	V
SPEAKERS SELECTOR PC BOARD	A2038A501C	U
	502C	C A
	503C	E B S
	504C	V
SPEAKERS IND PC BOARD	A2038A501D	U
	502D	C A
	503D	E B S
	504D	V
SPEAKERS TERMINAL PC BOARD	A2018D5070	V
PHONES PC BOARD	A2038A502C	U C A E B S
	512C	V
FUSE PC BOARD	A2038A501B	U
	511B	C A
	521B	E B S
	531B	V
VOLUME PC BOARD	A2037A502D	U C A E B S
	512D	V

—MEMO—

SECTION 2

PARTS LIST

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2. PRE AMP PC BOARD 14
3. TONE CONTROL/POWER SUPPLY PC BOARD 15
4. MAIN AMP PC BOARD 15
5. JACK PC BOARD 16
6. SELECTOR PC BOARD 16
7. SPEAKER SLECTOR PC BOARD 16
8. SPEAKER IND PC BOARD 16
9. VOLUME PC BOARD 16
10. HEAD PHONE PC BOARD 16
11. SPEAKER TERMINAL PC BOARD (V ONLY) 16
12. FUSE PC BOARD 16
13. ASSEMBLY BLOCK 16
14. FINAL ASSEMBLY BLOCK 18
15. INDEX 19

Resistor and Capacitor which is not listed in this parts list, please refer to COMMON LIST FOR SERVICE PARTS.

ATTENTION

1. When placing an order for parts, be sure to list the parts no. model no., and description of each part. If any of this information is omitted, there are instances in which parts cannot be shipped or the wrong parts will be delivered.
2. Please be careful not to make a mistake in the parts no. If the parts no. is in error, a part different from the one ordered may be delivered.
3. Because part numbers and part definitions and supply in the Preliminary Parts List may have been the subject of changes, please use this parts list for all future reference.

HOW TO USE THIS PARTS LIST

1. This Parts List shows those parts which are considered necessary for repairs. Other parts, such as resistors and capacitors, are shown in the "Common List for Service Parts" from which these parts should be selected and parts.
2. The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service.
3. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
4. How to read the parts list
   a) Mechanism Block

2. HEAD BASE BLOCK

REF. NO.	PART NO.	DESCRIPTION
2-1x	BH-T2023A320A	HEAD BASE BLOCK GX-F66R
2-2	HP-H2206A010A	HEAD R/P PR4-8FU C
2-3	ZS-477876	PAN20x03STL CMT
2-4	ZS-536488	BID20x08STL CMT
2-5	ZG-402895	CS ANGLE ADJUST SPRING

SP (Service Parts) Classification

A small "x" indicates the inability to show that particular part in the Photo or Illustration.

This number corresponds with the individual parts index number in that figure

This number corresponds with the Figure Number

b) P.C Board Block

6. SYS. CON. P C BOARD BLOCK

REF. NO.	PART NO.	DESCRIPTION
6-1	BA-T2034A070A	PC SYS CON BLK GX-F44R
6-IC1	EI-324536	IC HD14049BP
6-IC2	EI-336801	IC MB8841-564M
6-IC3	EI-331661	IC SN7405N
6-IC4	EI-336725	IC M54527P
6-TR1to4	ET-200985	TR 2SC2603 F,G
6-TR5to28	ET-554657	TR 2SA733A P,Q
6-D1	ED-318292	D SILICON H 1S2473T-77 T26
6-D2to4	ED-308952	D GERMA V 1K34A-LR F07
6-D5to10	ED-318292	D SILICON H 1S2473T-77 T26
6-X1	EI-318384	OSC X'TAL NC-18C 3.579545MHZ

SP (Service Parts) Classification

These reference symbols correspond with component symbols in the Schematic Diagrams.

5. The kind of part and its installation position can both be determined by the Part Number. To determine where a part number is listed, utilize the Parts Index at the end of the Parts List. It is necessary first of all to find the Part Number. This can be accomplished by using the Reference Number listed at the right of the part number in the Parts Index.

WARNING

⚠ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS

AVERTISSEMENT

⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÉCES RECOMMANDEES PAR LÉ FABRICANT

RECOMMENDED SPARE PARTS

Because, if the parts listed below are on hand, almost any repair can be accomplished, we suggest that you stock these Recommended Spare Parts Items.

REF. NO.	PART NO.	DESCRIPTION
1 N	BT-355409	⚠ TRANS POWER AM-A70T-30 (C,A)
2 N	BT-355411	⚠ TRANS POWER AM-A70T-40 (E)
3 N	BT-355412	⚠ TRANS POWER AM-A70T-50 (B,S)
4 N	BT-361998	⚠ TRANS POWER AM-A70T-60 (V)
5 N	BT-355408	⚠ TRANS POWER AM-A70T-70 (U)
6 N	ED-355425	D LED BG-5725-B7- GREEN
7	ED-356424	D LED BG5525S GREEN
8	ED-354114	D LED BR5507S RED
9 N	ED-355426	D LED PR-5705S-B7 RED
10	ED-345555	D SILICON DBB10C 200/1.0A
11	ED-348990	D SILICON H DS446
12	ED-301911	D SILICON H DS448
13 N	ED-355437	D SILICON PB-102F
14	ED-348786	D SILICON RB154 400/1.5A
15	ED-310387	D ZNEER H HZ12 B2
16	ED-328486	D ZENER H HZ15 3
17	ED-315759	D ZENER H HZ16 1
18	ED-324013	D ZENER H HZ20 2
19	ED-332336	D ZENER H HZ20 3
20	ED-329051	D ZENER H HZ24 3
21	ED-346619	D ZENER H HZ27 1
22	ED-346603	D ZENER H HZ6 A1
23 N	EF-355226	⚠ FUSE BET T 1.00A 250V [B]
24 N	EF-359086	⚠ FUSE BET T 4.00A 250V [B]
25	EF-623103	⚠ FUSE SEMKO T 1.00A 250V [U,E,V,S]
26	EF-690996	⚠ FUSE SEMKO T 4.00A 250V [U]
27	EF-309392	⚠ FUSE TSC 125V 1.25A [C,A]
28	EF-345658	⚠ FUSE TSC 125V 8.00A [C,A]
29	EI-345474	⚠ IC HA12002
30	EI-355697	⚠ IC M5221P
31	EI-344764	IC M5218P-21
32 N	EL-355435	PL LEAD 14.3V 80 MA
33 N	EQ-359532	⚠ RELAY POWER G5R2282P DC12V
34 N	EQ-355458	⚠ RELAY SIG G2Q-187P-V 12V
35	EQ-348929	⚠ RELAY SIG G5A-232P 2TR 12V
36	ER-345616	⚠ R CT W R33+R33 5W
37 N	ES-355407	⚠ SW PUSH ESB-99713V TV-8
38	ES-345481	⚠ SW PUSH SPEA12089A 04-2N
39	ES-349070	⚠ SW SELECTOR YKS11-0002 02-4 [U]
40	ES-348841	SW PUSH SPEA12090A 04-2S
41 N	ES-355417	SW PUSH SPEA71 7 THROW
42 N	ES-355418	SW PUSH SPEA84 8 THROW
43	ES-355429	SW PUSH SPUJ34
44 N	ES-355433	SW PUSH SPUL241
45	ET-348856	⚠ TR 2SA1106 O,Y
46	ET-348857	⚠ TR 2SC2581 O,Y
47	ET-355782	⚠ TR 2SD1247 T,U
48 N	ET-360750	TR FET 2SJ74 BL
49	ET-321016	TR FET 2SK117 GR,BL
50 N	ET-360749	TR FET 2SK170 BL
51 N	ET-359827	TR FET 2SK246 BL
52	ET-337759	TR FET 2SK246 GR
53	ET-348829	TR 2SA1209 S,T
54	ET-348834	TR 2SA1220 Q,P
55	ET-345626	TR 2SA1248 S,T
56	ET-355626	TR 2SA992 E,F
57	ET-347143	TR 2SC1845 E,F
58	ET-308141	TR 2SC2603 G
59	ET-348835	TR 2SC2690 Q,P
60	ET-348830	TR 2SC2909 S,T
61	ET-348831	TR 2SC2911 S,T
62	ET-345625	TR 2SC3116 S,T
63	ET-349081	TR 2SC3383 S,T
64	ET-310148	TR 2SD612K E,F
65	EV-380204	R S-FIX H SR19R 3P 0.15W 102
66	EV-338118	R S-FIX V H1052A 3P 0.15W 104
67 N	EV-355456	VR ROTARY RKDA10 105
68 N	EV-355457	VR ROTARY RKDA2S 100KCX2
69 N	EV-355466	VR ROTARY RKDA20 100KCX2
70 N	EV-355427	VR ROTARY RKGA20-250KBX2

"NOTE" N: New Parts

SYMBOL FOR DESTINATION
[A] : AAL (USA)
[B] : UK (ENGLAND)
[C] : CSA (CANADA)
[E] : CEE (EUROPE)
[S] : SAA (AUSTRALIA)
[U] : U/T (UNIVERSAL AREA)
[V] : VDE (WEST GERMANY)

1. PC BOARD BLOCK

REF. NO.	PART NO.	DESCRIPTION
1-1A	BA-A2037A020A	PC PRE BLK AM-A90 (U,C,A,E,B,S)
1-1B	BA-A2037A020B	PC PRE BLK AM-A90 (V)
1-2A	BA-A2037A040C	PC TONE BLK AM-A70 (U,E,B,S)
1-2B	BA-A2037A040F	PC TONE BLK AM-A70 (C,A)
1-2C	BA-A2037A040D	PC TONE BLK AM-A70 (V)
1-3A	BA-A2038A030A	PC MAIN BLK AM-A70 (U)
1-3B	BA-A2038A030B	PC MAIN BLK AM-A70 (C,A)
1-3C	BA-A2038A030C	PC MAIN BLK AM-A70 (E,B,S)
1-3D	BA-A2038A030D	PC MAIN BLK AM-A70 (V)

NOTE:

(1) PC PRE BLK cnosists of following PC BOARDS.
- PRE AMP PC BOARD
- SELECTOR PC BOARD
- VOLUME PC BOARD
- HEAD PHONE PC BOARD

(2) PC TONE BLK consists of following PC BOARDS.
TONE CONTROL/POWER SUPPLY PC BOARD
JACK PC BOARD

(3) PC MAIN BLK consists of following PC BOARDS.
- MAIN AMP PC BOARD
- SPEAKER SELECTOR PC BOARD
- SPEAKER IND PC BOARD
- FUSE PC BOARD

2. PRE AMP PC BOARD

REF. NO.	PART NO.	DESCRIPTION
2-IC1	EI-355697	IC M5221P
2-TR1	ET-360749	TR FET 2SK170 BL
2-TR2	ET-360750	TR FET 2SJ74 BL
2-TR3	ET-345625	⚠ TR 2SC3116 S,T
2-TR4	ET-345626	⚠ TR 2SA1248 S,T
2-TR5	ET-355626	TR 2SA992 E,F
2-TR6	ET-347143	TR 2SC1845 E,F
2-T R7	ET-348834	TR 2SA1220 Q,P
2-TR8	ET-348835	TR 2SC2690 Q,P
2-TR9	ET-348831	TR 2SC2911 S,T
2-TR10	ET-348829	TR 2SA1209 S,T
2-D2	ED-328486	D ZENER H HZ15 3
2-D3	ED-328486	D ZENER H HZ15 3
2-D4	ED-348990	D SILICON H DS446
2-D5	ED-348990	D SILICON H DS446
2-D6	ED-348990	D SILICON H DS446
2-D7	ED-348990	D SILICON H DS446
2-VR1	EV-338118	R S-FIX V H1052A 3P 0.15W 104
2-L1	EO-337684	COIL FIX 2 FL12R571E 751K [V]
2-RL1	EQ-348929	RELAY SIG G5A-232P 2TR 12V
2-R1	ER-311766	R MF H 1/4W 4702F
2-R5	RE-359825	⚠ R OMF H S20 FS 2W 621J
2-R8	ER-359825	⚠ R OMF H S20 FS 2W 621J
2-R27	ER-359508	R MF H 1/4W 5103G
2-R28	ER-359509	R MF H 1/4W 4703G
2-R29	ER-359510	R MF H 1/4W 5602G
2-R30	ER-359511	R MF H 1/4W 3302G
2-R31	ER-359512	R MF H 1/4W 5102G
2-R32	ER-359513	R MF H 1/4W 4702G
2-R33	ER-359514	R MF H 1/4W 5601G
2-R34	ER-359516	R MF H 1/4W 3301G
2-R43	ER-359524	⚠ R OMF H S20 FS 2W 362J
2-R46	ER-359524	⚠ R OMF H S20 FS 2W 362J
2-R47	ER-338187	R MF H 1/4W 153J
2-R48	ER-338187	R MF H 1/4W 153J
2-C1A	EC-349083	⚠ C STY V CUT CQ09S2B 101J 125DC [EXCEPT V]
2-C1B	EC-350675	C STY V CUT CQ09S2B 331J 125DC [V]
2-C2	EC-350745	⚠ C STY V CUT CQ09S2B 102J 125DC
2-C3	EC-355434	⚠ C MY V MKT 105K 100DC
2-C4	EC-343892	⚠ C PP V F05 FPS 1302G 100DC
2-C5	EC-359530	C PP V F05 PP 3601G 50DC
2-C6	EC-343917	⚠ C PP V F07 FPS 1303G 100DC
2-C7	EC-359531	C PP V F05 PP 3602G 50DC
2-C8	EC-345656	C PP V F05 PP 473J 50DC
2-J1	EJ-337404	PIN J AJC-052-ABB P 6P
2-J2	EJ-337424	PIN J AJC-034-ABB P 2P

3. TONE CONTROL/POWER SUPPLY PC BOARD

TONE CONTROL/POWER SUPPLY PC BOARD

REF. NO.	PART NO.	DESCRIPTION
3-IC1	EI-344764	IC M5218P-21
3-TR1	ET-337759	TR FET 2SK246 GR
3-TR2	ET-337759	TR FET 2SK246 GR
3-TR3	ET-345625	⚠ TR 2SC3116 S,T
3-TR4	ET-345626	⚠ TR 2SA1248 S,T
3-TR5	ET-337759	TR FET 2SK246 GR
3-TR6	ET-337759	TR FET 2SK246 GR
3-TR7	ET-345625	⚠ TR 2SC3116 S,T
3-TR8	ET-345626	⚠ TR 2SA1248 S,T
3-TR9	ET-310148	⚠ TR 2SD612K E,F
3-TR10	ET-359827	TR FET 2SK246 BL
3-D1	ED-348786	⚠ D SILICON RB154 400/1.5A
3-D2	ED-346619	⚠ D ZENER H HZ27 1
3-D3	ED-346619	⚠ D ZENER H HZ27 1
3-D4	ED-346619	⚠ D ZENER H HZ27 1
3-D5	ED-346619	⚠ D ZENER H HZ27 1
3-D6	ED-315759	⚠ D ZENER H HZ16 1
3-D7	ED-315759	⚠ D ZENER H HZ16 1
3-D8	ED-329051	⚠ D ZENER H HZ24 3
3-D9	ED-329051	⚠ D ZENER H HZ24 3
3-D10	ED-329051	⚠ D ZENER H HZ24 3
3-D11	ED-329051	⚠ D ZENER H HZ24 3
3-D12	ED-345555	⚠ D SILICON DBB10C 200/1.0A
3-D13	ED-310387	⚠ D ZENER H HZ12 B2
3-D14	ED-332336	⚠ D ZENER H HZ20 3
3-VR1	EV-355456	VR ROTARY RKDA10 105
3-VR2	EV-355457	VR ROTARY RKDA2S 100KCX2
3-VR3	EV-355466	VR ROTARY RKDA20 100KCX2
3-R18	ER-324184	⚠ R CB H S10 FS RDS 1/4W 121J
3-R19	ER-359823	⚠ R MF H 1/4W 203J
3-R20	ER-359823	R MF H 1/4W 203J
3-R21	ER-324184	⚠ R CB H S10 FS RDS 1/4W 121J
3-R22	ER-359826	⚠ R OMF H S20 FS 2W 302J
3-R23	ER-359826	⚠ R OMF H S20 FS 2W 302J
3-R24	ER-324184	⚠ R CB H S10 FS RDS 1/4W 121J
3-R25	ER-311766	R MF H 1/4W 4702F
3-R26	ER-346929	R MF H 1/4W 473J
3-R27	ER-324184	⚠ R CB H S10 FS RDS 1/4W 121J
3-R29	ER-324184	⚠ R CB H S10 FS RDZ 1/4W 121J
3-R30	ER-359824	⚠ R OMF H S20 FS 2W 822J
3-C8	EC-201639	C EC V CUT SM 331M 80DC
3-C9	EC-201639	C EC V CUT SM 331M 80DC

ASSEMBLY BLOCK

REF. NO.	PART NO.	DESCRIPTION
3-F3A	EF-309392	⚠ FUSE TSC 125V 1.25A [C,A]
3-F3B	EF-623103	⚠ FUSE SEMKO T 1.00A 250V [U,E,B,S]
3-F3C	EF-355226	⚠ FUSE BET T 1.00A 250V [B]
3-F4A	EF-309392	⚠ FUSE TSC 125V 1.25A [C,A]
3-F4B	EF-623103	⚠ FUSE SEMKO T 1.00A 250V [U,E,V,S]
3-F4C	EF-355226	⚠ FUSE BET T 1.00A 250V [B]
3-F5A	EF-310229	⚠ FUSE TSC 125V 1.00A [C,A]
3-F5B	EF-623103	⚠ FUSE SEMKO T 1.00A 250V [U,E,V,S]
3-F5C	EF-355226	⚠ FUSE BET T 1.00A 250V [B]

4. MAIN AMP PC BOARD

REF. NO.	PART NO.	DESCRIPTION
4-IC1	EI-355697	⚠ IC M5221P
4-IC2	EI-345474	⚠ IC HA12002
4-TR1	ET-321016	TR FET 2SK117 GR,BL
4-TR2	ET-348835	TR 2SC2690 G,P
4-TR3	ET-348834	TR 2SA1220 Q,P
4-TR4	ET-348830	TR 2SC2909 S,T
4-TR5	ET-348830	TR 2SC2909 S,T
4-TR6	ET-348829	⚠ TR 2SA1209 S,T
4-TR7	ET-348831	⚠ TR 2SC2911 S,T
4-TR8	ET-348831	⚠ TR 2SC2911 S,T
4-TR9	ET-348829	⚠ TR 2SA1209 S,T
4-TR10	ET-348830	TR 2SC2909 S,T
4-TR11	ET-348830	TR 2SC2909 S,T
4-TR12	ER-338244	TR 2SA1207 RS
4-D1	ED-324013	D ZENER H HZ20 2
4-D2	ED-324013	D ZENER H HZ20 2
4-D3	ED-348990	D SILICON H DS446
4-D4	ED-346613	D ZENER H HZ11 C3
4-D5	ED-346613	D ZENER H HZ11 C3
4-D6	ED-348990	D SILICON H DS446
4-D7	ED-346603	D ZENER H HZ6 A1
4-D8 to 12	ED-301911	D SILICON H DS448
4-D13	ED-355437	⚠ D SILICON PB-102F
4-D14	ED-348990	D SILICON H DS446
4-D15	ED-348990	D SILICON H DS446
4-D16	ED-301911	D SILICON H DS448
4-SW1	ES-355429	SW PUSH SPUJ34
4-VR1	EV-380204	R S-FIX H SR19R 3P 0.15W 102
4-L1	EO-332116	COIL FIX 2 103AK-006A 2R2K
4-RL1	EQ-359532	RELAY POWER G5R2282P DC 12V
4-R4A	ER-362240	R MF H 1/4W 105J [EXCEPT V]
4-R4B	ER-338183	R MF H 1/4W 104J [V]
4-R5	ER-359521	⚠ R OMF H S20 FS 2W 332J
4-R8	ER-359521	⚠ R OMF H S20 FS 2W 332J
4-R9	ER-311760	R MF H 1/4W 1802F
4-R10	ER-311760	⚠ R MF H 1/4W 1802F
4-R15	ER-341331	⚠ R OMF H S15 FS 1W 181J
4-R16	ER-341331	⚠ R OMF H S15 FS 1W 181J
4-R21	ER-333429	⚠ R CB H S10 FS RDS 1/4W 682J
4-R22	ER-333429	⚠ R CB H S10 FS RDS 1/4W 682J
4-R24	ER-325638	⚠ R OMF H S15 FS 1W 271J
4-R27	ER-325638	⚠ R OMF H S15 FS 1W 271J
4-R30	ER-322787	⚠ R CB H S10 FS RDS 1/4W 100J
4-R31	ER-322787	⚠ R CB H S10 FS RDS 1/4W 100J
4-R32	ER-333398	⚠ R CB H S10 FS RDS 1/4W 302J
4-R33 to 36	ER-333372	⚠ R CB H S10 FS RDS 1/4W 150J
4-R37	ER-327197	⚠ R CB H S10 FS RDS 1/4W 391J
4-R38	ER-345616	⚠ R CT W R33+R33 5W
4-R39	ER-345616	⚠ R CT W R33+R33 5W
4-R50	ER-359520	⚠ R OMF H S20 FS 2W 120J
4-R52	ER-359520	⚠ R OMF H S20 FS 2W 120J
4-R65	ER-359521	⚠ R OMF H S20 FS 2W 332J
4-R68	ER-359823	R MF H 1/4W 203J
4-R70	ER-338187	R MF H 1/4W 153J
4-C1	EC-344155	C PP V F05 PP 181J 50DC
4-C2	EC-345655	C PP V F05 PP 223J 50DC
4-C3A	EC-362238	C PP V F05 PP 203J 50DC [EXCEPT V]
4-C3B	EC-359525	C PP V F05 PP 823J 50DC [V]
4-C4	EC-359829	C PP V F05 PP 151J 50DC
4-C5	EC-345656	C PP V F05 PP 473J 50DC
4-C9	EC-355461	C MY V MKT 334K 100DC
4-C12	EC-355460	C EC V SNP 103M 63.0DC
4-C13	EC-355460	C EC V SNP 103M 63.0DC

5. JACK PC BOARD

REF. NO.	PART NO.	DESCRIPTION
5-TR1	ET-308141	TR 2SC2603 G
5-TR2	ET-308141	TR 2SC2603 G
5-TR3	ET-308141	⚠ TR 2SC2603 G
5-TR4	ET-308141	⚠ TR 2SC2603 G
5-RL1	EQ-355458	RELAY SIG G2Q-187P-V 12V
5-R8	ER-324337	⚠ R CB H S10 FS RDS 1/4W 560J
5-R17	ER-322591	⚠ R CB H S10 FS RDS 1/4W 101J
5-R18	ER-322591	⚠ R CB H S10 FS RDS 1/4W 101J
5-J3 to 5	EJ-336915	PIN J AJC-054-ABB P 4P
5-J6	EJ-355459	PIN J YKC21-0157 P 4P

6. SELECTOR PC BOARD

REF. NO.	PART NO.	DESCRIPTION
6-TR1 to 3	ET-349081	TR 2SC3383 S,T
6-D1	ED-354114	D LED BR5507S RED
6-D2	ED-355425	D LED BG-5725-B7 GREEN
6-D3	ED-355426	D LED PR-5705S-B7 RED
6-SW1	ES-355417	SW PUSH SPEA71 7 THROW
6-SW2	ES-355418	SW PUSH SPEA84 8 THROW
6-SW3	ES-348841	SW PUSH SPEA12090A 04-2S
6-SW4	ES-345481	SW PUSH SPEA12089A 04-2N
6-SW5	ES-348841	SW PUSH SPEA12090A 04-2S
6-SW6	ES-345481	SW PUSH SPEA12089A 04-2N
6-IN1 to 7	EL-355435	PL LEAD 14.3V 80MA

7. SPEAKER SELECTOR PC BOARD

REF. NO.	PART NO.	DESCRIPTION
7-SW1	ES-355433	SW PUSH SPUL241
7-R1	ER-306416	⚠ R OMF H S20 FS 2W 271J
7-R2	ER-306416	⚠ R OMF H S20 FS 2W 271J

8. SPEAKER IND PC BOARD

REF. NO.	PART NO.	DESCRIPTION
8-D1 to 4	ED-356424	D LED BG5525S GREEN

9. VOLUME PC BOARD

REF. NO.	PART NO.	DESCRIPTION
9-VR1	EV-355427	VR ROTARY RKGA20-250KBX2

10. HEAD PHONE PC BOARD

REF. NO.	PART NO.	DESCRIPTION
10-R1	ER-557583	⚠ R OMF H FS 2W 431J
10-J19	EJ-348846	PHONE J 3P HLJ0540 6.3

11. SPEAKER TERMINAL PC BOARD (V ONLY)

REF. NO.	PART NO.	DESCRIPTION
11-TM902	EJ-342935	TERMINAL W/SCREW YKD31-0132 P 8P [V]

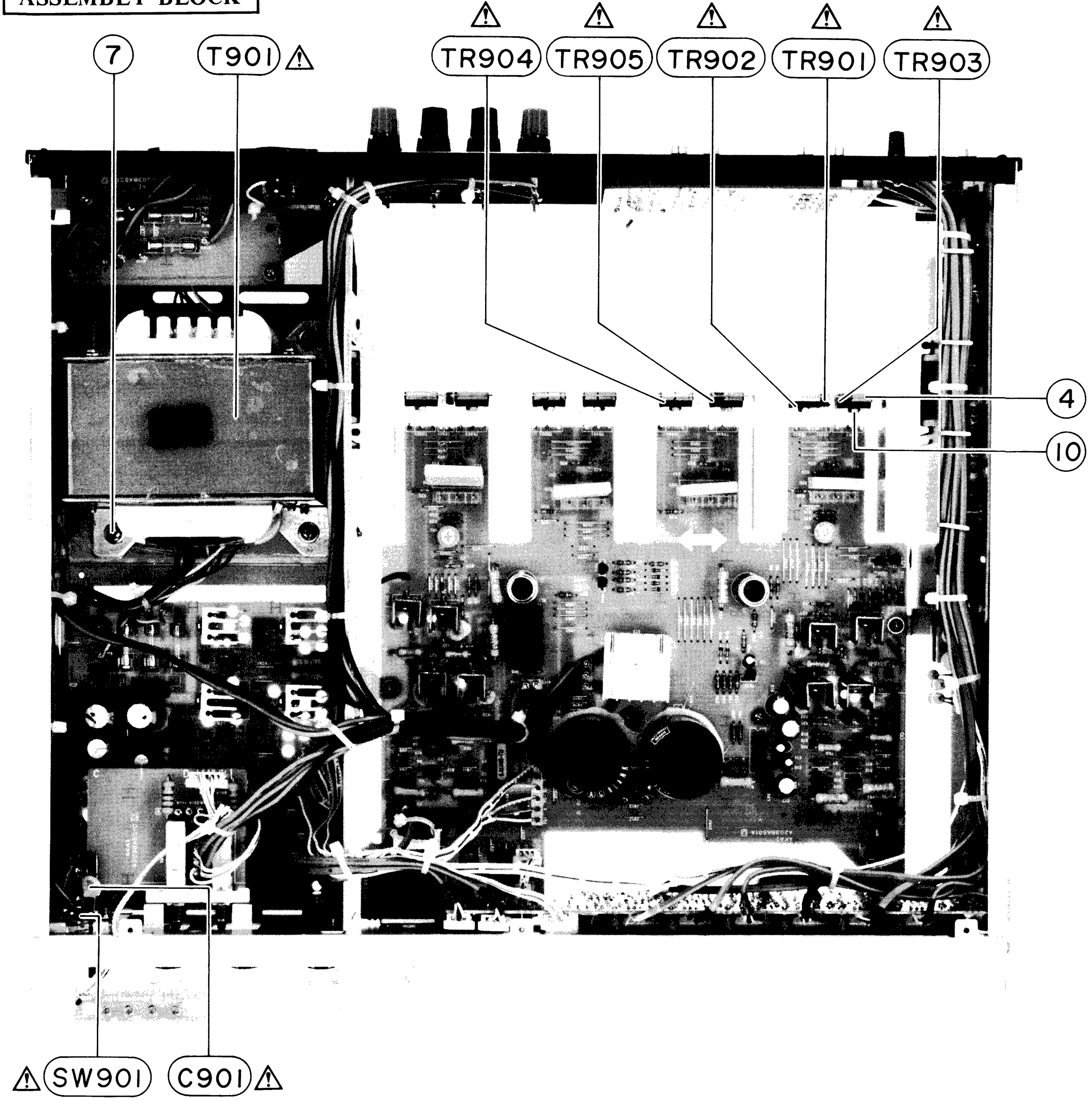
12. FUSE PC BOARD

REF. NO.	PART NO.	DESCRIPTION
	FUSE PC BOARD	
12-L1	EO-338409	COIL LF FK0B160MH02 250UH [V]
	ASSEMBLY BLOCK	
12-F1A	EF-690996	⚠ FUSE SEMKO T 4.00A 250V [U]
12-F1B	EF-345658	⚠ FUSE TSC 125V 8.00A [C,A]
12-F1C	EF-690996	⚠ FUSE SEMKO T 4.00A 250V [E,V,S]
12-F1D	EF-359086	⚠ FUSE BET T 4.00A 250V [B]
12-F2	EF-690996	⚠ FUSE SEMKO T 4.00A 250V [U]

13. ASSEMBLY BLOCK

REF. NO.	PART NO.	DESCRIPTION
	ASSEMBLY BLOCK	
13-1A	SP-358664A	PANEL REAR AM-A70 (U)
13-1B	SP-358664B	PANEL REAR AM-A70 (A,C)
13-1C	SP-358664C	PANEL REAR AM-A70 (E)
13-1D	SP-358664D	PANEL RERR AM-A70 (B,S)
13-1E	SP-358664J	PANEL REAR AM-A70 (V)
13-2	EJ-329610	TERMIANL W/SCREW UB-0067 L 1P
13-3	ZS-319460	T2BR30×06STL BZN PROJECTION
13-4	EZ-345459	TRANSISTOR SUPPORT BFG-20T0-3P
13-5A	EW-374894	⚠ AC CORD 2 CORES VM-0129A, VFF U/T [U]
13-5B	EW-349427	⚠ AC CORD 2 CORES KP-8W, SPT-2 UC [C,A]
13-5C	EW-347897	⚠ AC CORD 2 CORES VM0364, LCFL EV [E,V]
13-5D	EW-346249	⚠ AC CORD 2 CORES LCFL2×0.75 B [B]
13-5E	EW-338517	⚠ AC CORD KP-560, LTSA-2F S [S]
13-6	EZ-631945	STRAIN RELIEF SR-4N-4
13-7	ZS-345624	ST PAN40×08STL CMT CUP [POWER TRANS FIX]
13-8	SA-312465	FOOT CIRCULAR (A) PART CA
13-9	ZS-325495	T2BR30×06STL CMT [FOOT FIX]
13-10	ZS-345436B	SCREW TRANSISTOR (B)
13-T901A	BT-355408	⚠ TRANS POWER AM-A70T-70 (U)
13-T901B	BT-355409	⚠ TRANS POWER AM-A70T-30 (C,A)
13-T901C	BT-355411	⚠ TRANS POWER AM-A70T-40 (E)
13-T901D	BT-355412	⚠ TRANS POWER AM-A70T-50 (B,S)
13-T901E	BT-361998	⚠ TRANS POWER AM-A70T-60(V)
13-TR901	ET-355782	⚠ TR 2SD1247 T,U
13-TR902	ET-348857	⚠ TR 2SC2581 O,Y
13-TR903	ET-348857	⚠ TR 2SC2581 O,Y
13-TR904	ET-348856	⚠ TR 2SA1106 O,Y
13-TR905	ET-348856	⚠ TR 2SA1106 O,Y
13-VS901	ES-349070	⚠ SW SELECTOR YKS11-0002 02-4 [U]
13-SW901	ES-355407	⚠ SW PUSH ESB-99713V TV-8
13-J901A	EJ-337405	⚠ SOCKET OUTLET S2T733T164 JU C 3×2P [U]
13-J901B	EJ-352642	⚠ SOCKET OUTLET S2T733T114T [C,A]
13-TM902A	EJ-337406	⚠ TERMINAL W/SCREW ANB-024A AA S 8P [U,C,A,E,B,S]
13-TM902B	EJ-342935	⚠ TERMINAL W/SCREW YKD31-0132 P 8P [V]
13-C901A	EC-320548	⚠ C CE V F 103Z 250AC [U]
13-C901B	EC-338411	⚠ C CE V FZ 103P 400AC [C,A,E,B,V,S]
	PRE AMP PC BORAD	
2-J1	EJ-337404	PIN J AJC-052-ABB P 6P
2-J2	EJ-337424	PIN J AJC-034-ABB P 2P
	JACK PC BOARD	
5-J3	EJ-336915	PIN J AJC-054-ABB P 4P
5-J4	EJ-336915	PIN J AJC-054-ABB P 4P
5-J5	EJ-336915	PIN J AJC-054-ABB P 4P
5-J6	EJ-355459	PIN J YKC21-0157P 4P

ASSEMBLY BLOCK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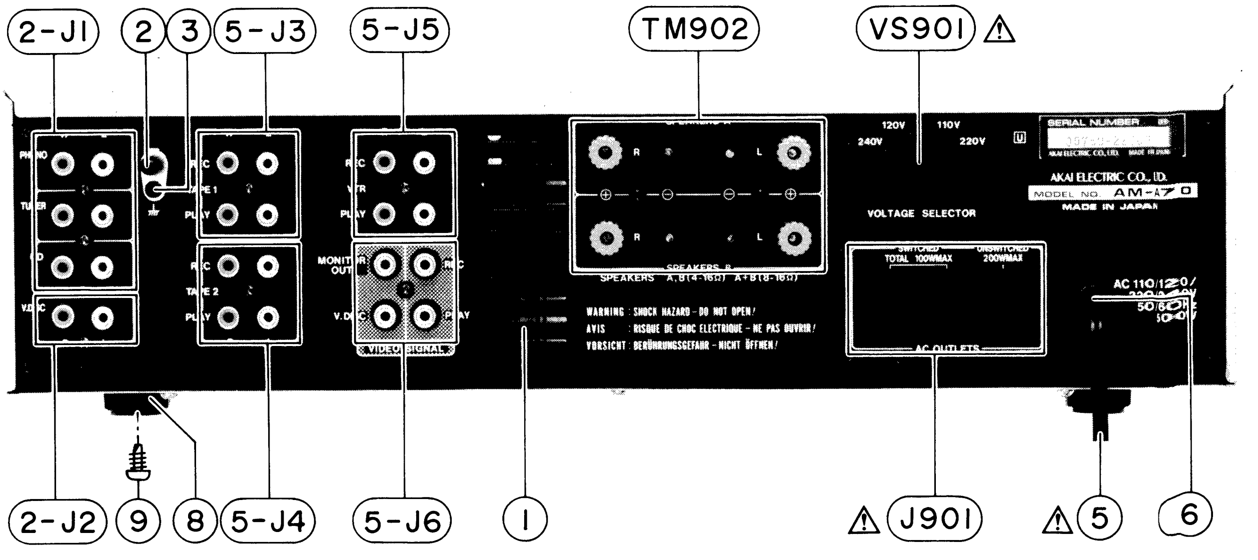
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3
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TM902
VS901 ⚠
PHONO
TUNER
V.DISC
REC
TAPE 1
PLAY
TAPE 2
VTR
MONITOR OUT
VIDEO SIGNAL
SPEAKERS A,B(4-16Ω) A+B(8-16Ω)
SPEAKERS B
WARNING : SHOCK HAZARD - DO NOT OPEN!
AVIS : RISQUE DE CHOC ELECTRIQUE - NE PAS OUVRIR!
VORSICHT : BERÜHRUNGSGEFAHR - NICHT ÖFFNEN!
120V
110V
240V
220V
VOLTAGE SELECTOR
SERIAL NUMBER
AKAI ELECTRIC CO., LTD.
MODEL NO.
MADE IN JAPAN
SWITCHED TOTAL 100WMAX
UNSWITCHED 200WMAX
AC OUTLETS
AC 110/120/
50/60Hz
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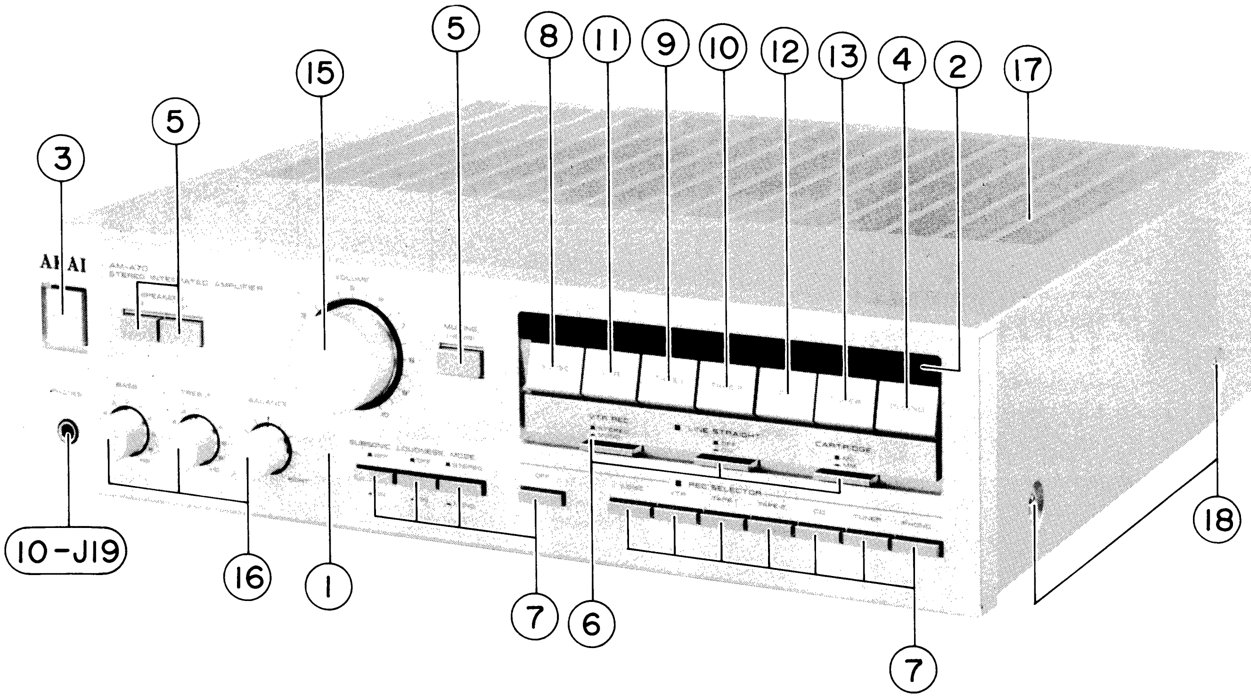
9
8
5-J4
5-J6
1
⚠ J901
⚠ 5
6

FINAL ASSEMBLY BLOCK



14. FINAL ASSEMBLY BLOCK

REF. NO.	PART NO.	DESCRIPTION
14-1	BD-A2037A060B	PANEL FRONT BLK AM-A70
14-1B	BD-A2037A060D	PANEL FRONT BLK AM-A70-B
14-2	SE-358656	WINDOW FILTER
14-3	SK-345231A	CAP POWER
14-3B	SK-345231C	CAP POWER-B
14-4	SK-B358655A7	KNOB PUSH (D-13) PART (PHONO)
14-4B	SK-B358655B7	KNOB PUSH (D-14) B PART (PHONO -B)
14-5	SK-358649A	KNOB PUSH (A)
14-5B	SK-358649B	KNOB PUSH (A)-B
14-6	SK-358651A	KNOB PUSH (B)
14-6B	SK-358651B	KNOB PUSH(B)-B
14-7	SK-358653A	KNOB PUSH (C)
14-7B	SK-358653B	KNOB PUSH (C)-B
14-8	SK-B358655A1	KNOB PUSH (D-1) PART (V, DISC)
14-8B	SK-B358655B1	KNOB PUSH (D-2) B PART (V. DISC-B)
14-9	SK-B358655A2	KNOB PUSH (D-3) PART (TAPE 1)
14-9B	SK-B358655B2	KNOB PUSH (D-4) B PART (TAPE 1-B)
14-10	SK-B358655A3	KNOB PUSH (D-5) PART (TPAE 2)
14-10B	SK-B358655B3	KNOB PUSH (D-6)B PART (TAPE 2-B)
14-11	SK-B358655A4	KNOB PUSH (D-7) PART (VTR)
14-11B	SK-B358655B4	KNOB PUSH (D-8)B PART (VTR-B)
14-12	SK-B358655A5	KNOB PUSH (D-9) PART (CD)
14-12B	SK-B358655B5	KNOB PUSH (D-10)B PART (CD-B)
14-13	SK-B358655A6	KNOB PUSH (D-11) PART (TUNER)
14-13B	SK-B358655B6	KNOB PUSH (D-12)B PART (TUNER-B)
	FINAL ASSEMBLY BLOCK	
14-14x	ZS-447840	T2BR30x08STL CMT [PANEL FRONT FIX]
14-15	SK-358657A	KNOB MAIN VOLUME
14-15B	SK-358657B	KNOB MAIN VOLUME-B
14-16	SK-358658A	KNOB VOLUME
14-16B	SK-358658B	KNOB VOLUME-B
14-17	SP-358673A	COVER UPPER
14-17B	SP-358673B	COVER UPPER-B
14-18	ZS-322570	ST BID40x08STL NI3 [COVER UPPER FIX]
14-18B	ZS-322580	ST BID40x08STL BNI [COVER UPPER FIX]
	HEAD PHONE PC BOARD	
10-J19	EJ-348846	PHONE J 3P HLJ0540 6.3

NOTE:
PANEL FRONT BLK consists of 14-2 to 14-13B.

SYMBOL FOR COLOR VARIATION
NON : STANDARD COLOR
B : BLACK

INDEX

PART NO.	REF. NO.	PART NO.	REF. NO.	PART NO.	REF. NO.	PART NO.	REF. NO.	PART NO.	REF. NO.
BA-A2037A020A	1-1A	EF-345658	12-F1B	ER-359521	4-R5	SE-358656	14-2		
BA-A2037A020B	1-1B	EF-355226	3-F3C	ER-359521	4-R8	SK-B358655A1	14-8		
BA-A2037A040C	1-2A	EF-355226	3-F4C	ER-359521	4-R65	SK-B358655A2	14-9		
BA-A2037A040D	1-2C	EF-355226	3-F5C	ER-359524	2-R43	SK-B358655A3	14-10		
BA-A2037A040F	1-2B	EF-359086	12-F1D	ER-359524	2-R46	SK-B358655A4	14-11		
BA-A2038A030A	1-3A	EF-623103	3-F3B	ER-359823	3-R19	SK-B358655A5	14-12		
BA-A2038A030B	1-3B	EF-623103	3-F4B	ER-359823	3-R20	SK-B358655A6	14-13		
BA-A2038A030C	1-3C	EF-623103	3-F5B	ER-359823	4-R68	SK-B358655A7	14-4		
BA-A2038A030D	1-3D	EF-690996	12-F1A	ER-359824	3-R30	SK-B358655B1	14-8B		
BD-A2037A060B	14-1	EF-690996	12-F1C	ER-359825	2-R8	SK-B358655B2	14-9B		
BD-A2037A006D	14-1B	EF-690996	12-F2	ER-359825	2-R5	SK-B358655B3	14-10B		
BT-355408	13-T901A	EI-344764	3-IC1	ER-359826	3-R22	SK-B358655B4	14-11B		
BT-355409	13-T901B	EI-345474	4-IC2	ER-359826	3-R23	SK-B358655B5	14-12B		
BT-355411	13-T901C	EI-355697	2-IC1	ER-362240	4-R4A	SK-B358655B6	14-13B		
BT-355412	13-T901D	EI-355697	4-IC1	ER-557583	10-R1	SK-B358655B7	14-4B		
BT-361998	13-T901E	EJ-329610	13-2	ES-345481	6-SW4	SK-345231A	14-3		
EC-201639	3-C8	EJ-336915	5-J3	ES-345481	6-SW6	SK-345231C	14-3B		
EC-201639	3-C9	EJ-336915	5-J4	ES-348841	6-SW3	SK-358649A	14-5		
EC-320548	13-C901A	EJ-336915	5-J5	ES-348841	6-SW5	SK-358649B	14-5B		
EC-338411	13-C901B	EJ-337404	2-J1	ES-349070	13-VS901	SK-358651A	14-6		
EC-343892	2-C4	EJ-337405	13-J901A	ES-355407	13-SW901	SK-358651B	14-6B		
EC-343917	2-C6	EJ-337406	13-TM902A	ES-355417	6-SW1	SK-358653A	14-7		
EC-344155	4-C1	EJ-337424	2-J2	ES-355418	6-SW2	SK-358653B	14-7B		
EC-345655	4-C2	EJ-342935	11-TM902	ES-355429	4-SW1	SK-358657A	14-15		
EC-345656	2-C8	EJ-342935	13-TM902B	ES-355433	7-SW1	SK-358657B	14-15B		
EC-345656	4-C5	EJ-348846	10-J19	ET-308141	5-TR1	SK-358658A	14-16		
EC-349083	2-C1A	EJ-352642	13-J901B		to 4	SK-358658B	14-16B		
EC-350675	2-C1B	EJ-355459	5-J6	ET-310148	3-TR9	SP-358664A	13-1A		
EC-350745	2-C2	EL-355435	6-IN1	ET-321016	4-TR1	SP-358664B	13-1B		
EC-355434	2-C3		to 7	ET-337759	3-TR1	SP-358664C	13-1C		
EC-355460	4-C12	EO-332116	4-L1	ET-337759	3-TR2	SP-358664D	13-1D		
EC-355460	4-C13	EO-337684	2-L1	ET-337759	3-TR5	SP-358664J	13-1E		
EC-355461	4-C9	EO-338409	12-L1	ET-337759	3-TR6	SP-358673A	14-17		
EC-359525	4-C3B	EQ-348929	2-RL1	ET-345625	2-TR3	SP-358673B	14-17B		
EC-359530	2-C5	EQ-355458	5-RL1	ET-345625	3-TR3	ZS-319460	13-3		
EC-359531	2-C7	EQ-359532	4-RL1	ET-345625	3-TR7	ZS-322570	14-18		
EC-359829	4-C4	ER-306416	7-R1	ET-345626	2-TR4	ZS-322580	14-18B		
EC-362238	4-C3A	ER-306416	7-R2	ET-345626	3-TR8	ZS-325495	13-9		
ED-301911	4-D10	ER-311760	4-R9	ET-345626	3-TR4	ZS-345436B	13-10		
ED-301911	4-D8	ER-311760	4-R10	ET-347143	2-TR6	ZS-345624	13-7		
ED-301911	4-C11	ER-311766	2-R1	ET-348829	2-TR10	ZS-447840	14-14x		
ED-301911	4-D9	ER-311766	3-R25	ET-348829	4-TR6				
ED-301911	4-D12	ER-322591	5-R17	ET-348829	4-TR9				
ED-301911	4-D16	ER-322591	5-R18	ET-348830	4-TR4				
ED-310387	3-D13	ER-322787	4-R30	ET-348830	4-TR5				
ED-315759	3-D6	ER-322787	4-R31	ET-348830	4-TR10				
ED-315759	3-D7	ER-324184	3-R18	ET-348830	4-TR11				
ED-324013	4-D1	ER-324184	3-R21	ET-348831	2-TR9				
ED-324013	4-D2	ER-324184	3-R24	ET-348831	4-TR7				
ED-328486	2-D2	ER-324184	3-R27	ET-348831	4-TR8				
ED-328486	2-D3	ER-324184	3-R29	ET-348834	2-TR7				
ED-329051	3-D8	ER-324337	5-R8	ET-348834	4-TR3				
ED-329051	3-D9	ER-325638	4-R24	ET-348835	2-TR8				
ED-329051	3-D11	ER-325638	4-R27	ET-348835	4-TR2				
ED-329051	3-D10	ER-327197	4-R37	ET-348856	13-TR904				
ED-332336	3-D14	ER-333372	4-R33	ET-348856	13-TR905				
ED-345555	3-D12		to 36	ET-348857	13-TR902				
ED-346603	4-D7	ER-333398	4-R32	ET-348857	13-TR903				
ED-346613	4-D5	ER-333429	4-R21	ET-349081	6-TR1				
ED-346613	4-D4	ER-333429	4-R22	ET-349081	6-TR2				
ED-346619	3-D2	ER-338183	4-R4B	ET-349081	6-TR3				
	to 5	ER-338187	2-R47	ET-355626	2-TR5				
ED-348786	3-D1	ER-338187	2-R48	ET-355782	13-TR901				
ED-348990	2-D4	ER-338187	4-R70	ET-359827	3-TR10				
	to 7	ER-338224	4-TR12	ET-360749	2-TR1				
ED-348990	4-D14	ER-341331	4-R15	ET-360750	2-TR2				
ED-348990	4-D15	ER-341331	4-R16	EV-338118	2-VR1				
ED-348990	4-D3	ER-345616	4-R38	EV-355427	9-VR1				
ED-348990	4-D6	ER-345616	4-R39	EV-355456	3-VR1				
ED-354114	6-D1	ER-346929	3-R26	EV-355457	3-VR2				
ED-355425	6-D2	ER-359508	2-R27	EV-355466	3-VR3				
ED-355426	6-D3	ER-359509	2-R28	EV-380204	4-VR1				
ED-355437	4-D13	ER-359510	2-R29	EW-338517	13-5E				
ED-356424	8-D1	ER-359511	2-R30	EW-346249	13-5D				
ED-356424	8-D2	ER-359512	2-R31	EW-347897	13-5C				
ED-356424	8-D3	ER-359513	2-R32	EW-349427	13-5B				
ED-356424	8-D4	ER-359514	2-R33	EW-374894	13-5A				
EF-309392	3-F3A	ER-359516	2-R34	EZ-345459	13-4				
EF-309392	3-F4A	ER-359520	4-R50	EZ-631945	13-6				
EF-310229	3-F5A	ER-359520	4-R52	SA-312465	13-8				

AKAI

SCHEMATIC DIAGRAM AND PC BOARDS

MODEL AM-A70

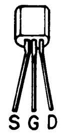
LOCATION OF COMPONENTS

TRs
TR1.....2C
TR2.....2D
TR3.....1C
TR4.....2C
TR6.....2E
TR7.....1D
TR8.....2D
TR9.....3E
TR10....3E

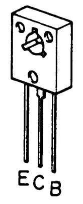
IC
IC1.....1F

CONNECTORS
W301....1E
W302....1E
W303....1E
W304....2F
W305....1F
W308....1E
W309....1E
W310....1F

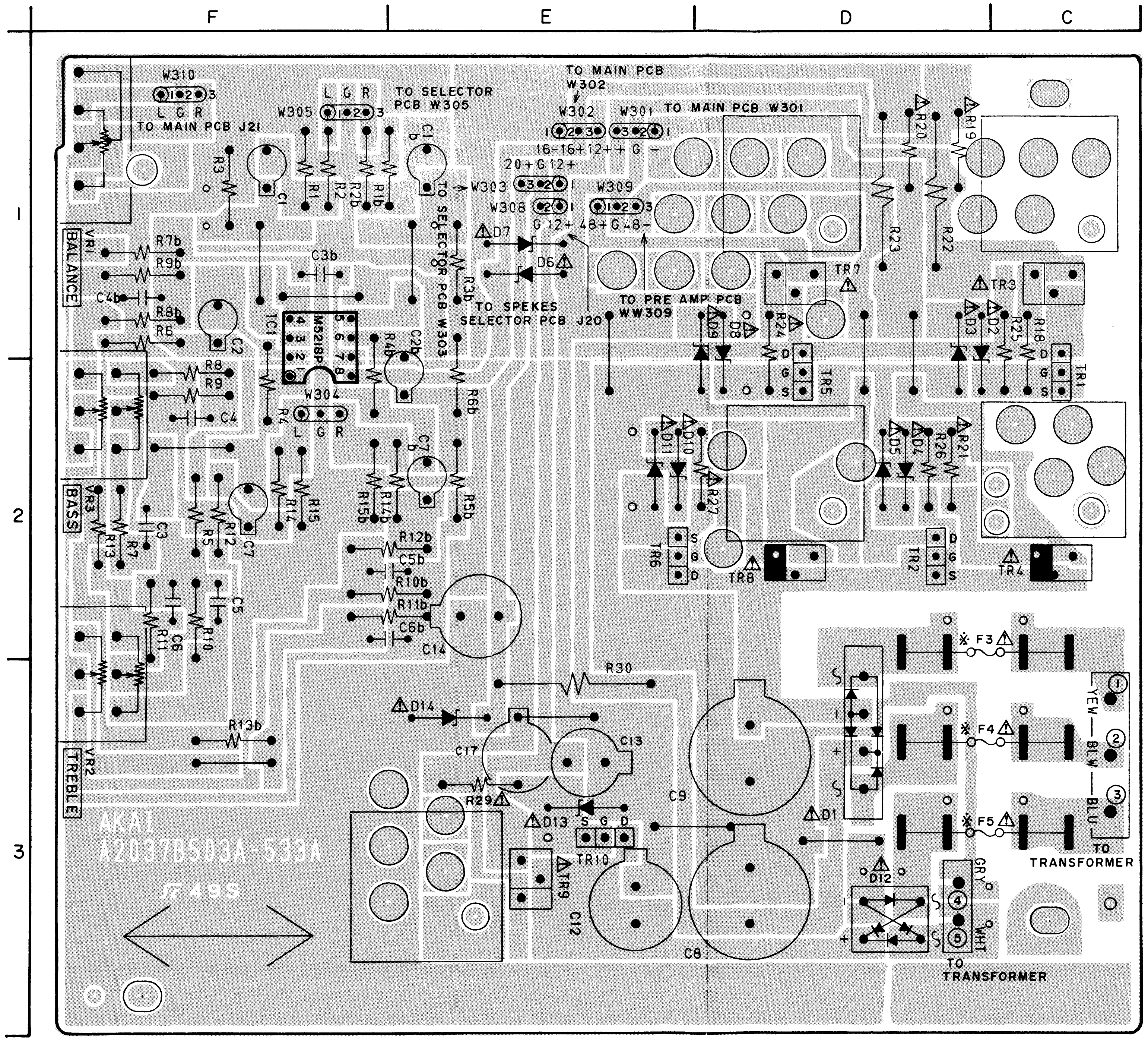
TR1,2,5,6.....2SK246(GR)
TR3,7.........2SC3116(S.T)
TR4,8.........2SA1248(S.T)
TR9...........2SD612K(E.F)
TR10..........2SK246(BL)



2SK246



2SA1248
2SC3116
2SD612K



F
E
D
C
1
2
3
W310
L G R
TO MAIN PCB J21
W305
TO SELECTOR PCB W305
TO MAIN PCB W302
W302
W301
TO MAIN PCB W301
16-16+12+ + G -
20+G 12+
W303
W308
W309
G 12+ 48+G 48-
TO SELECTOR PCB W303
TO SPEKES SELECTOR PCB J20
TO PRE AMP PCB WW309
VR1 BALANCE
VR3 BASS
VR2 TREBLE
IC1
M5218P
W304
L G R
C1
C2
C3
C4
C5
C6
C7
C8
C9
C12
C13
C14
C17
R1
R2
R3
R4
R5
R6
R7
R8
R9
R10
R11
R12
R13
R14
R15
R18
R19
R20
R21
R22
R23
R24
R25
R26
R27
R29
R30
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
D12
D13
D14
TR1
TR2
TR3
TR4
TR5
TR6
TR7
TR8
TR9
TR10
F3
F4
F5
YEW
BLW
BLU
GRY
WHT
TO TRANSFORMER
AKAI
A2037B503A-533A

TONE CONTROL/POWER SUPPLAY PCB A2037B523A U.E.B.S
513A C.A
533A V

B
●●● = NPN TRANSISTOR

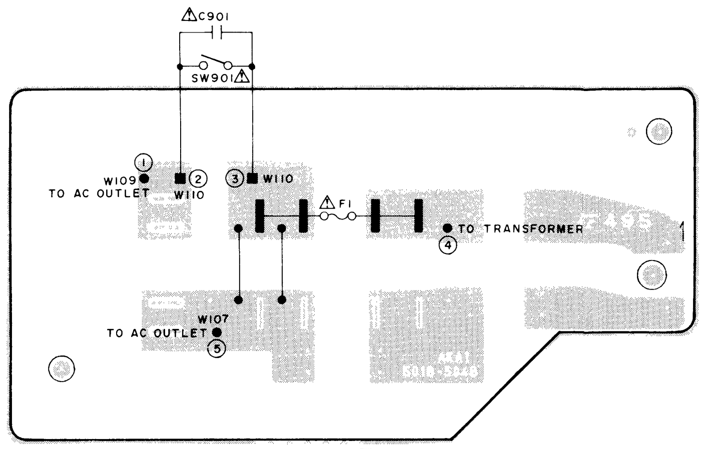
B
■●● = PNP TRANSISTOR

●●● = FILED EFFECT TRANSISTOR

※	C.A	U.E.V.S	B
F3	1.25A 125V	T1A 250V	T1A 250V
F4	1.25A 125V	T1A 250V	T1A 250V
F5	1A 125V	T1A 250V	T1A 250V

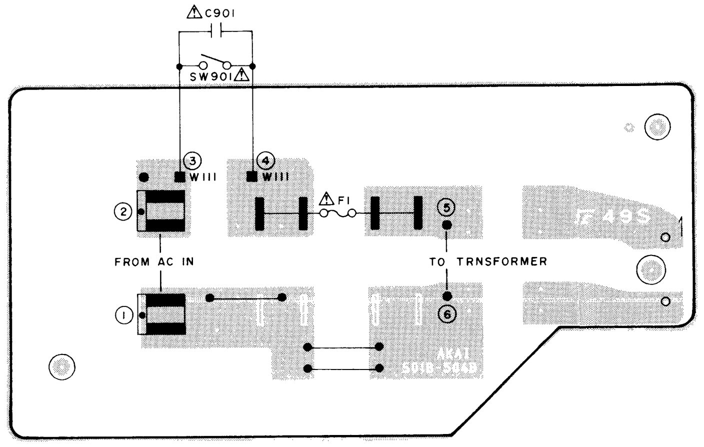
WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT



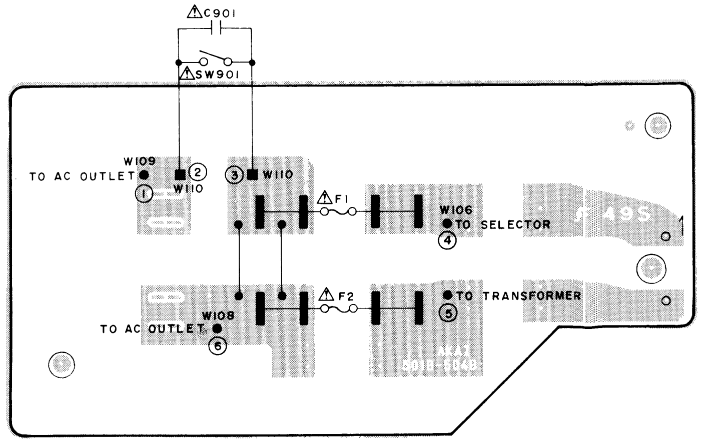
C901
SW901
W109
TO AC OUTLET
W110
F1
TO TRANSFORMER
W107
TO AC OUTLET

FUSE PCB A2038A502B C.A



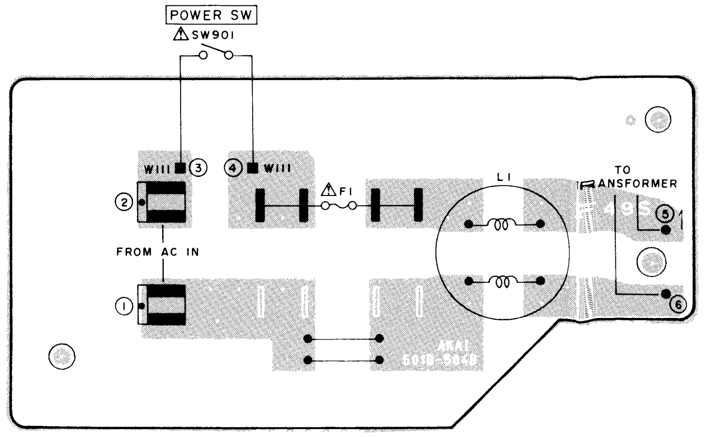
C901
SW901
W111
F1
FROM AC IN
TO TRNSFORMER

FUSE PCB A2038A503B E.B.S



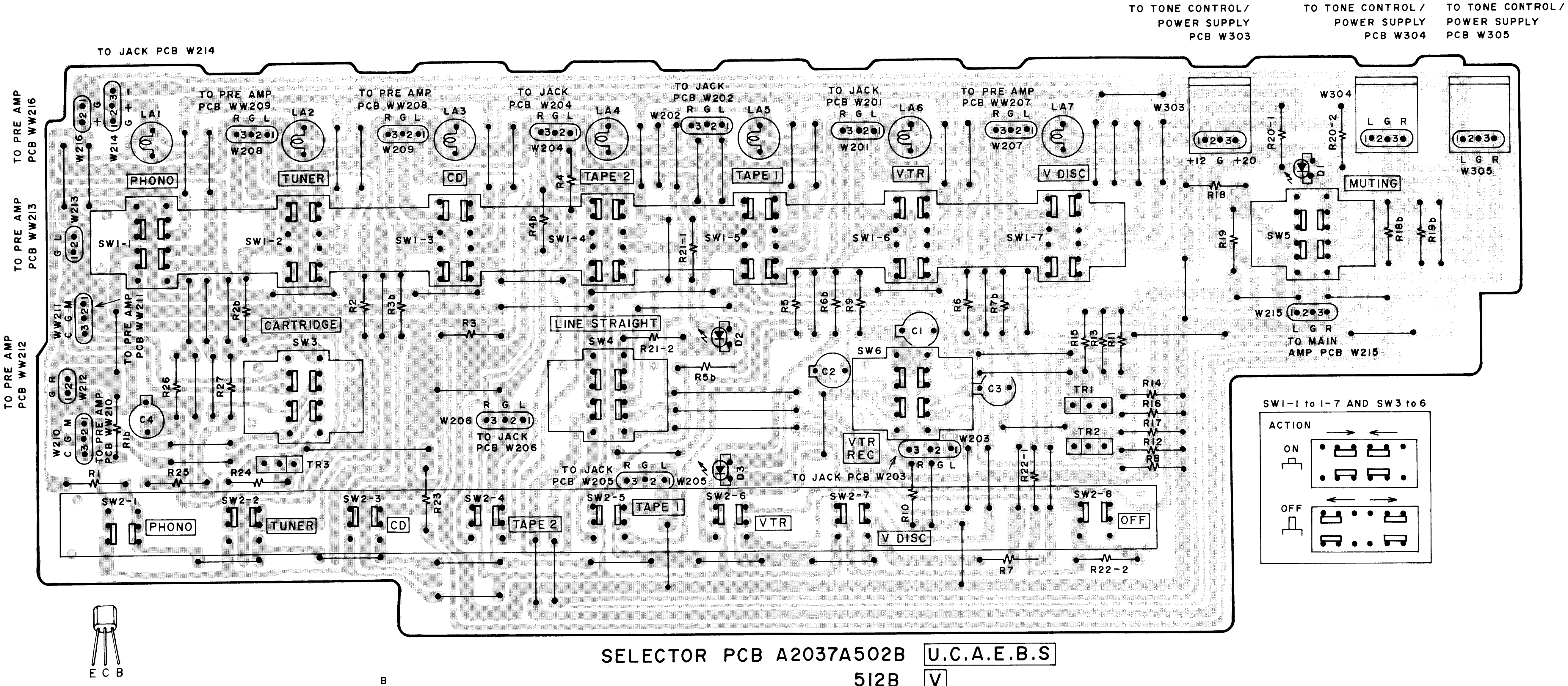
C901
SW901
W109
TO AC OUTLET
W110
F1
W106
TO SELECTOR
F2
TO TRANSFORMER
W108
TO AC OUTLET

FUSE PCB A2038A501B U



POWER SW
SW901
W111
F1
L1
FROM AC IN
TO TRANSFORMER

FUSE PCB A2038A504B V


TO TONE CONTROL/ POWER SUPPLY PCB W303
TO TONE CONTROL/ POWER SUPPLY PCB W304
TO TONE CONTROL/ POWER SUPPLY PCB W305
TO JACK PCB W214
TO PRE AMP PCB WW216
TO PRE AMP PCB WW213
TO PRE AMP PCB WW212
TO PRE AMP PCB WW211
TO PRE AMP PCB WW210
TO PRE AMP PCB WW209
TO PRE AMP PCB WW208
TO JACK PCB W204
TO JACK PCB W202
TO JACK PCB W201
TO PRE AMP PCB WW207
W216
W214
W213
W211
W212
W210
W208
W209
W204
W202
W201
W207
W303
W304
W305
W215
W206
W205
W203
+12 G +20
L G R
R G L
C G M
LA1
LA2
LA3
LA4
LA5
LA6
LA7
PHONO
TUNER
CD
TAPE 2
TAPE 1
VTR
V DISC
MUTING
SW1-1
SW1-2
SW1-3
SW1-4
SW1-5
SW1-6
SW1-7
SW5
CARTRIDGE
SW3
LINE STRAIGHT
SW4
SW6
VTR REC
TO JACK PCB W206
TO JACK PCB W205
TO JACK PCB W203
TO MAIN AMP PCB W215
SW2-1
SW2-2
SW2-3
SW2-4
SW2-5
SW2-6
SW2-7
SW2-8
OFF
C1
C2
C3
C4
D1
D2
D3
TR1
TR2
TR3
R1
R1b
R2
R2b
R3
R3b
R4
R4b
R5
R5b
R6
R6b
R7
R7b
R8
R9
R10
R11
R12
R13
R14
R15
R16
R17
R18
R18b
R19
R19b
R20-1
R20-2
R21-1
R21-2
R22-1
R22-2
R23
R24
R25
R26
R27
SW1-1 to 1-7 AND SW3 to 6
ACTION
ON
OFF
E C B

SELECTOR PCB A2037A502B U.C.A.E.B.S

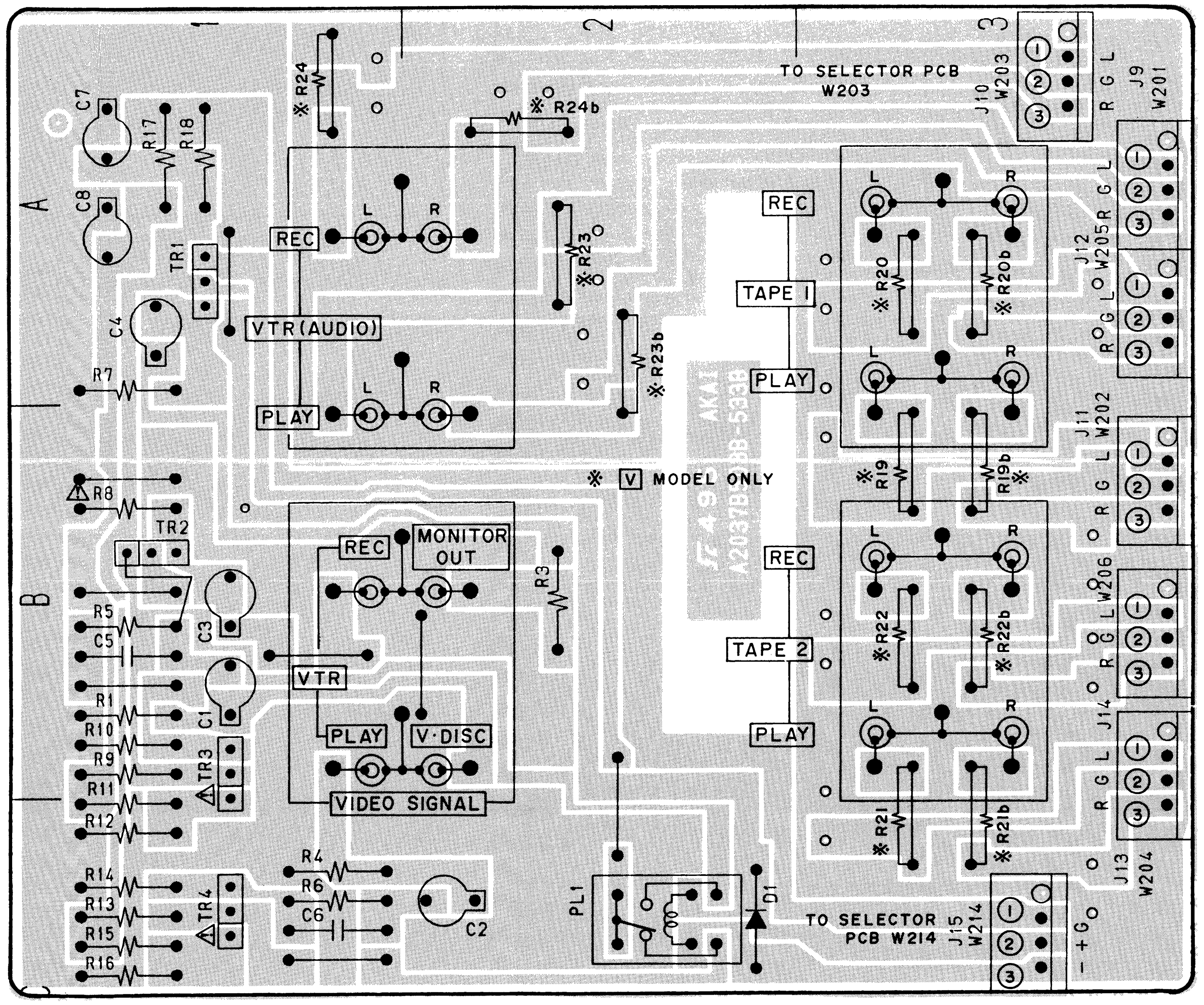
512B V

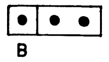
2SC3383

TR1 to 3 ---- 2SC3383

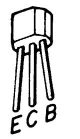
B

● ● ● = NPN TRANSISTOR


TO SELECTOR PCB W203
TO SELECTOR PCB W201
TO SELECTOR PCB W205
TO SELECTOR PCB W202
TO SELECTOR PCB W206
TO SELECTOR PCB W204
TO SELECTOR PCB W214
REC
VTR(AUDIO)
PLAY
TAPE 1
TAPE 2
MONITOR OUT
VTR
V·DISC
VIDEO SIGNAL
※ V MODEL ONLY
AKAI
A2037B523B-533B
TR1
TR2
TR3
TR4
PL1
D1
J9
J10
J11
J12
J13
J14
J15


= NPN TRANSISTOR

TR,S
TR1 to 4 ---- 2SC603(E.F)



2SC603

JACK PCB A2037B523B U.E.B.S
513B C.A
533B V

WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS
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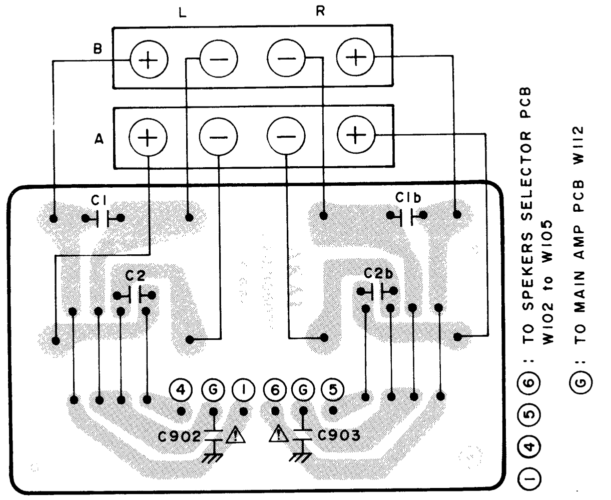
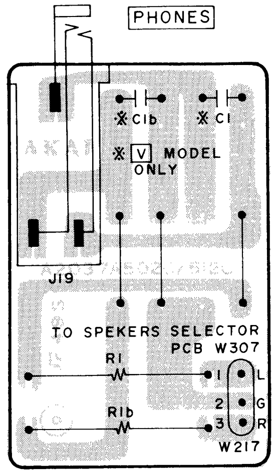
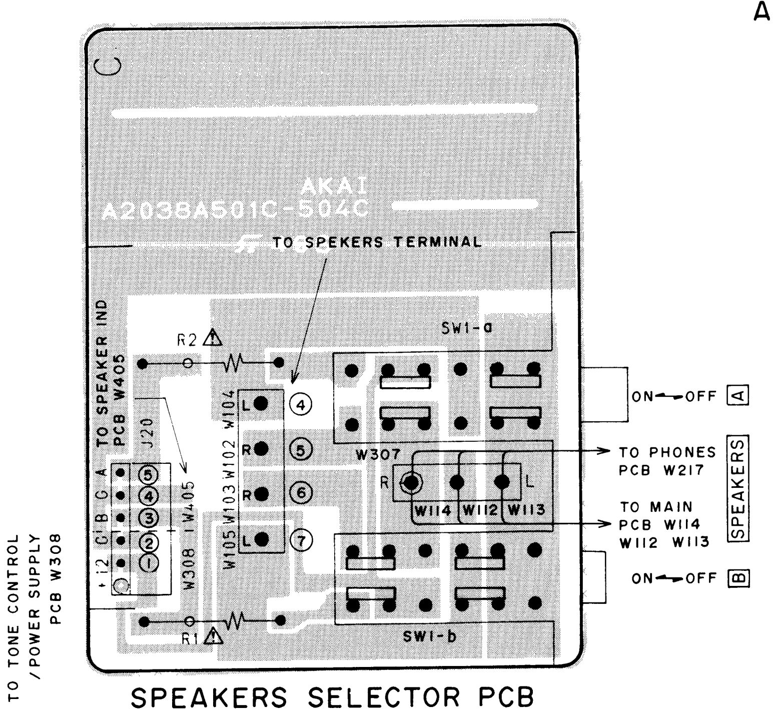

L
R
A
B
C1
C1b
C2
C2b
C902
C903
①④⑤⑥: TO SPEKERS SELECTOR PCB W102 to W105
Ⓖ: TO MAIN AMP PCB W112

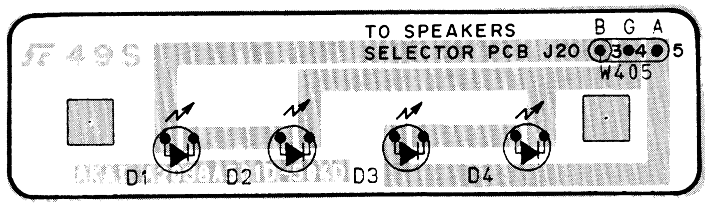
SPEAKERS TERMINAL PCB
A2018D5070 V **MODEL ONLY**


PHONES
※C1b
※C1
※ V MODEL ONLY
J19
TO SPEKERS SELECTOR PCB W307
R1
R1b
W217

PHONES PCB
A2037A502C U.C.A.E.B.S
A2037A512C V


AKAI
A2038A501C-504C
TO SPEKERS TERMINAL
TO SPEAKER IND PCB W405
TO TONE CONTROL /POWER SUPPLY PCB W308
R2
R1
SW1-a
SW1-b
ON ⟷ OFF A
ON ⟷ OFF B
TO PHONES PCB W217
TO MAIN PCB W114 W112 W113
SPEAKERS
W307
W114
W112
W113
J20

SPEAKERS SELECTOR PCB
A2038A501C U
A2038A502C C.A
A2038A503C E.B.S
A2038A504C V


TO SPEAKERS SELECTOR PCB J20
B G A
W405
D1
D2
D3
D4

SPEAKERS IND PCB
A2038A501D U
A2038A502D C.A
A2038A503D E.B.S
A2038A504D V

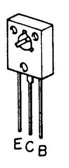
LOCATION OF COMPONENTS

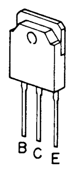
TRs	
TR1	2SK117(Y)
TR2	2SC2960(GR)
TR3	2SA1220(Q,P)
TR4,5,10,11	2SC2909(S,T)
TR6,9	2SC1209(S,T)
TR7,8	2SC2911(S,T)
TR901	2SD1247(Y,U)
TR902,903	2SC2581(O,Y)
TR904,905	2SA1106(O,Y)
TR12	2SA1207(Y)

TRs	
TR1	3E
TR1b	3A
TR2	3E
TR2b	3A
TR3	3E
TR3b	3A
TR4	3E
TR4b	3A
TR5	3E
TR5b	3A
TR6	4E
TR6b	4A
TR7	4E
TR7b	4A
TR8	5E
TR8b	5A
TR9	4E
TR9b	4A
TR10	5E
TR10b	5B
TR11	5E
TR11b	5B
TR12	4D
TR901	6E
TR901b	6A
TR902	6D
TR902b	6A
TR903	6E
TR903b	6A
TR904	6C
TR904b	6B
TR905	6D
TR905b	6B

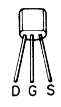
ICs	
IC1	3B
IC2	3D

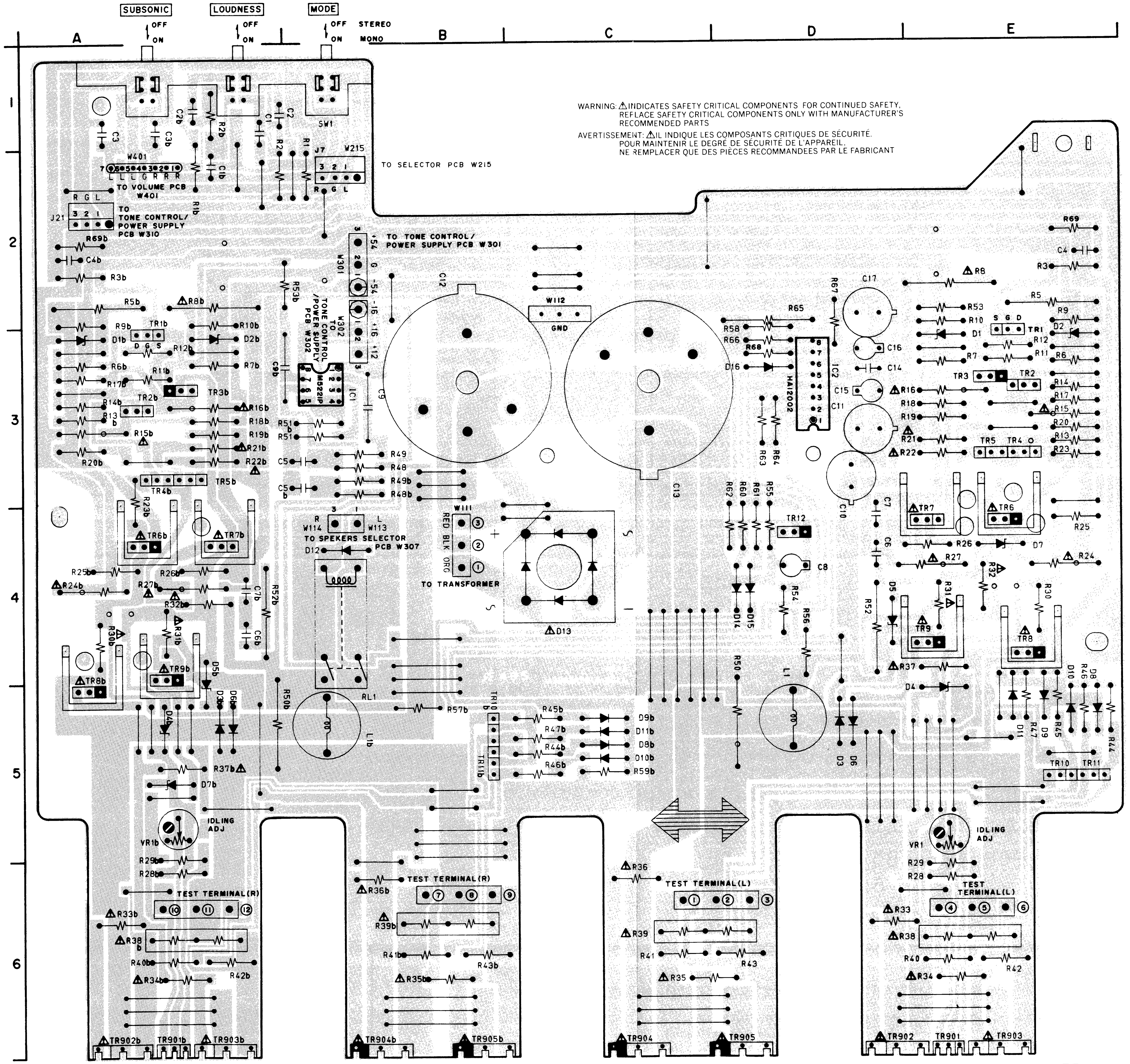
CONNECTORS	
W111	4B
W112	2C
W113	4B
W114	4B
W301	2B
W302	3B
W401	2A
J7	2B
J21	2A


2SA1209
2SC2911


2SA1106
2SC2581

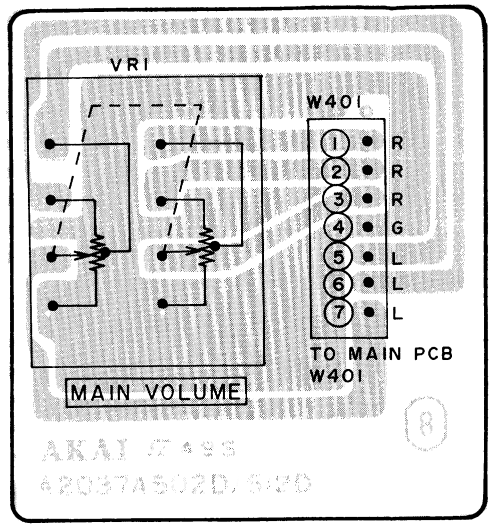
2SC2960


2SK117

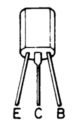

SUBSONIC
LOUDNESS
MODE
OFF
ON
STEREO
MONO
A
B
C
D
E
1
2
3
4
5
6
SW1
W401
7 6 5 4 3 2 1
L L L G R R R
TO VOLUME PCB W401
J21
R G L
3 2 1
TO TONE CONTROL/ POWER SUPPLY PCB W310
J7
W215
3 2 1
R G L
TO SELECTOR PCB W215
W301
+54 G -54 -16 +16 +12
TO TONE CONTROL/ POWER SUPPLY PCB W301
W302
TO TONE CONTROL /POWER SUPPLY PCB W302
IC1
M5221P
W112
GND
C12
C13
IC2
HA12002
W111
RED BLK ORG
TO TRANSFORMER
D13
R W114
L W113
TO SPEKERS SELECTOR PCB W307
D12
RL1
L1b
L1
TR1b
TR2b
TR3b
TR4b
TR5b
TR6b
TR7b
TR8b
TR9b
TR1
TR2
TR3
TR4
TR5
TR6
TR7
TR8
TR9
TR10
TR11
TR12
TR10b
TR11b
VR1b
IDLING ADJ
VR1
TEST TERMINAL(R)
⑩ ⑪ ⑫
TEST TERMINAL(R)
⑦ ⑧ ⑨
TEST TERMINAL(L)
① ② ③
TEST TERMINAL(L)
④ ⑤ ⑥
TR902b
TR901b
TR903b
TR904b
TR905b
TR904
TR905
TR902
TR901
TR903
R5b
R8b
R9b
D1b
D G S
R12b
R10b
D2b
R6b
R11b
R7b
R17b
R14b
R13b
R16b
R18b
R19b
R21b
R15b
R22b
R20b
R23b
R25b
R26b
R24b
R27b
R32b
C7b
C6b
R52b
R30b
R31b
D5b
D3b
D6b
D4b
R37b
D7b
R29b
R28b
R33b
R38b
R40b
R42b
R34b
R36b
R39b
R41b
R43b
R35b
R50b
R53b
R51b
C5b
C5
R49
R48
R49b
R48b
R57b
R45b
R47b
R44b
R46b
D9b
D11b
D8b
D10b
R59b
R58
R65
R66
R68
D16
R67
C17
C16
C14
C15
C11
R63
R64
R62
R60
R61
R55
C10
C8
D14
D15
R54
R56
R50
R69
C4
R3
R8
R5
R9
R53
R10
D1
S G D
D2
R12
R7
R11
R6
R16
R18
R19
R21
R22
R14
R17
R15
R20
R13
R23
C7
C6
R26
D7
R25
R27
R32
R24
D5
R52
R31
R30
R37
D4
D10
R46
D8
D11
R47
D9
R45
R44
D3
D6
R29
R28
R33
R38
R40
R42
R34
R36
R39
R41
R43
R35
C3
C3b
C2b
R2b
C1
C2
R2
R1
C1b
R1b
R69b
C4b
R3b
C9b
C9

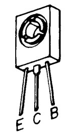
WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

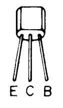
AVERTISSEMENT: ⚠IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT


VR1
W401
① R
② R
③ R
④ G
⑤ L
⑥ L
⑦ L
TO MAIN PCB W401
MAIN VOLUME
AKAI
A2037A502D/512D
8

VOLUME PCB
A2037A502D [U.C.A.E.B.S]
A2037A521D [V]


2SD1247


2SA1220

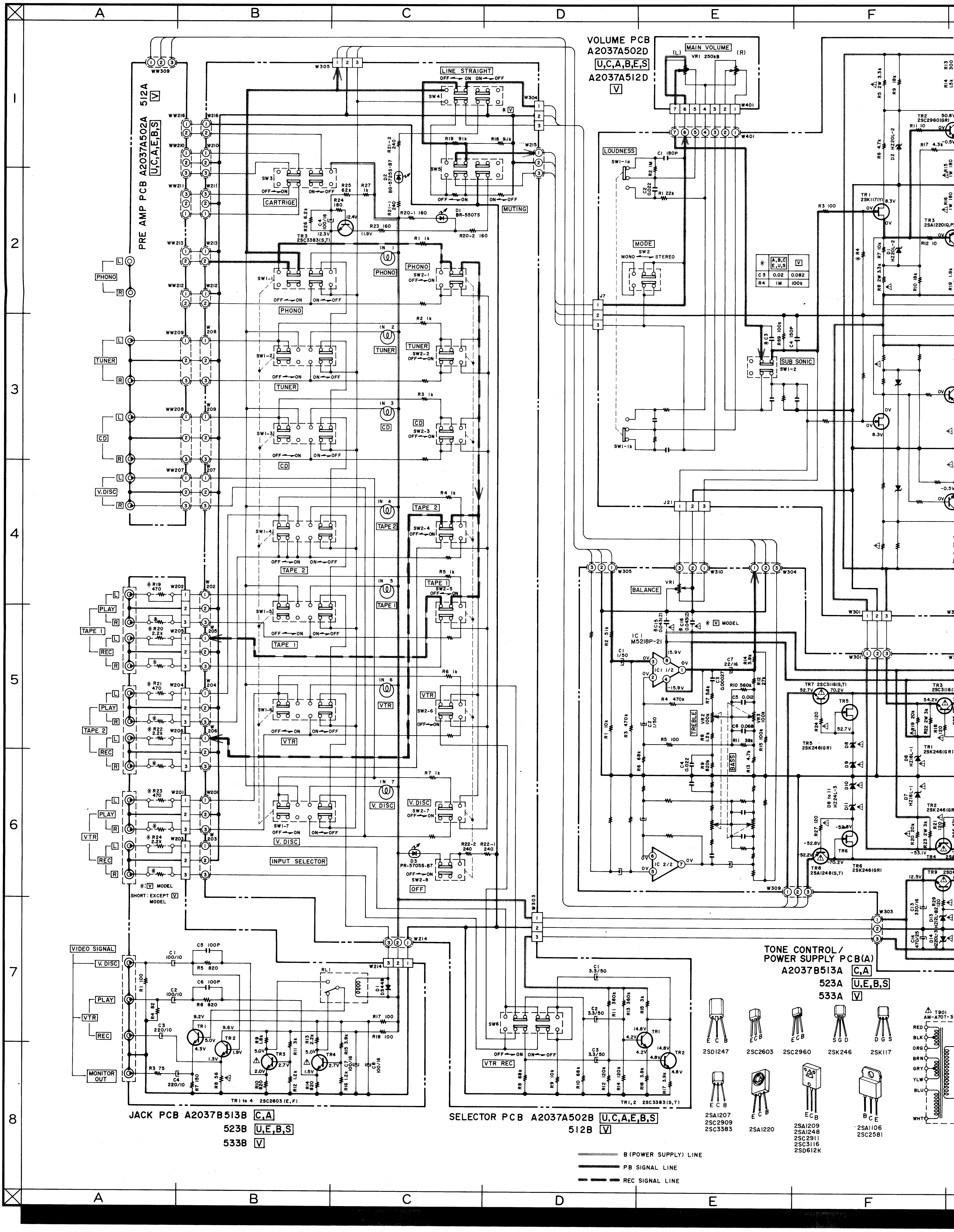

2SA1207
2SC2909

B
●●● = NPN TRANSISTOR

B
■●● = PNP TRANSISTOR

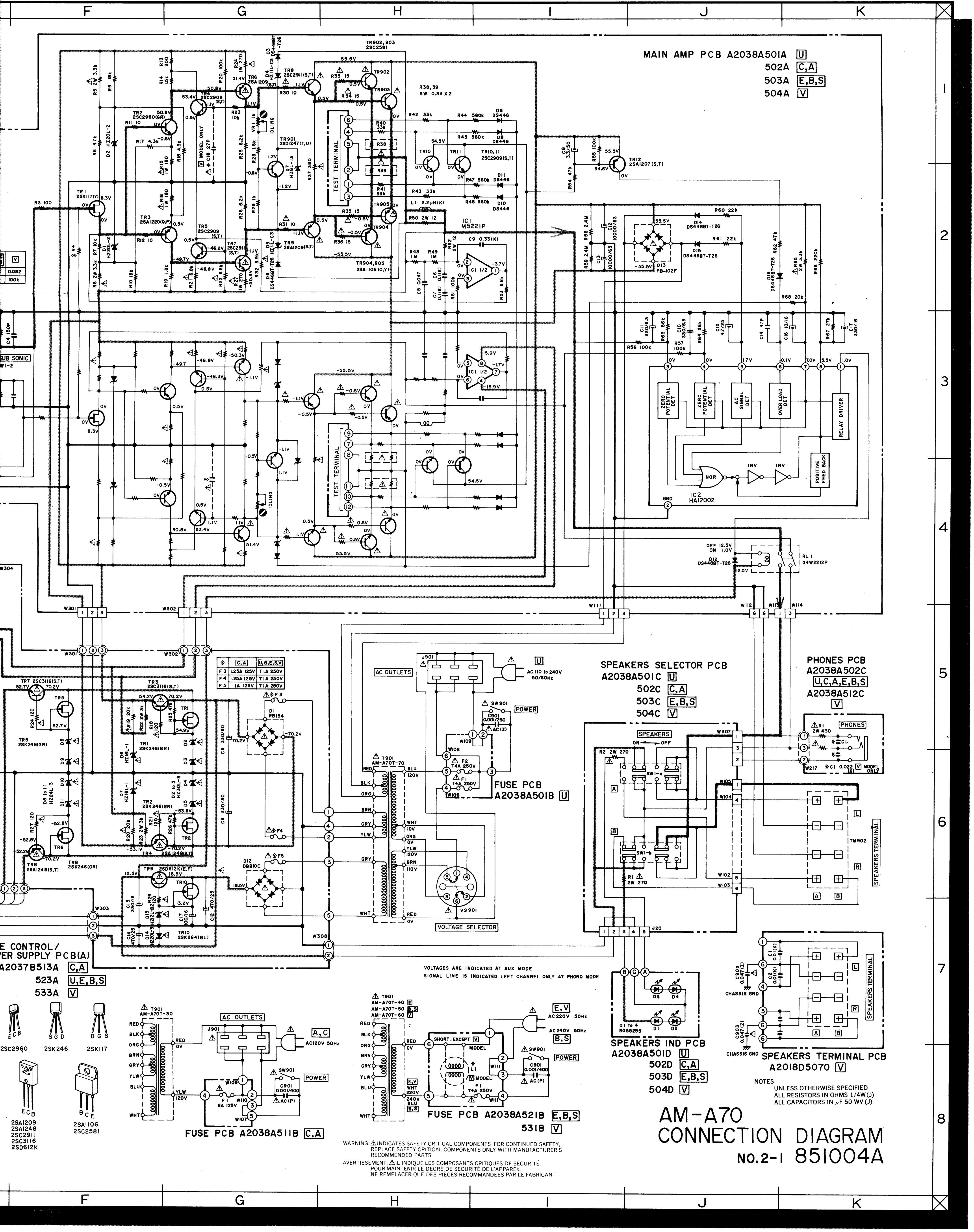
●●● = FILED EFFECT TRANSISTOR

MAIN AMP PCB A2038A501A [U]
502A [C.A]
503A [E.B.S]
504A [V]



A
B
C
D
E
F
1
2
3
4
5
6
7
8
PRE AMP PCB A2037A502A U,C,A,E,B,S 512A V
VOLUME PCB
A2037A502D
U,C,A,B,E,S
A2037A512D
V
MAIN VOLUME
VR1 250kB
LINE STRAIGHT
CARTRIGE
MUTING
LOUDNESS
MODE
MONO STEREO
SUB SONIC
BALANCE
TREBLE
BASS
PHONO
TUNER
CD
V.DISC
TAPE 1
TAPE 2
VTR
PLAY
REC
INPUT SELECTOR
OFF
VTR REC
IC1 M5218P-21
※ V MODEL
SHORT: EXCEPT V MODEL
VIDEO SIGNAL
MONITOR OUT
TR1 to 4 2SC2603 (E,F)
TR1,2 2SC3383(S,T)
JACK PCB A2037B513B C,A
523B U,E,B,S
533B V
SELECTOR PCB A2037A502B U,C,A,E,B,S
512B V
TONE CONTROL/
POWER SUPPLY PCB(A)
A2037B513A C,A
523A U,E,B,S
533A V
2SD1247
2SC2603
2SC2960
2SK246
2SK117
2SA1207
2SC2909
2SC3383
2SA1220
2SA1209
2SA1248
2SC2911
2SC3116
2SD612K
2SA1106
2SC2581
T901
RED
BLK
ORG
BRN
GRY
YLW
BLU
WHT
B (POWER SUPPLY) LINE
PB SIGNAL LINE
REC SIGNAL LINE

※	A,B,C E,U,S	V
C3	0.02	0.082
R4	1M	100k



F
G
H
I
J
K
MAIN AMP PCB A2038A501A U
502A C,A
503A E,B,S
504A V
TEST TERMINAL
IDLING
IC1 M5221P
IC2 HA12002
ZERO POTENTIAL DET
AC SIGNAL DET
OVER LOAD DET
RELAY DRIVER
POSITIVE FEED BACK
NOR
INV
RL1 G4W2212P
W301
W302
W303
W304
W308
W111
W112
W113
W114
SUB SONIC
E CONTROL/
VER SUPPLY PCB(A)
A2037B513A C,A
523A U,E,B,S
533A V
AC OUTLETS
J901
AC110 to 240V 50/60Hz
SW901
POWER
T901 AM-A70T-70
FUSE PCB A2038A501B U
VOLTAGE SELECTOR
VS901
SPEAKERS SELECTOR PCB
A2038A501C U
502C C,A
503C E,B,S
504C V
SPEAKERS
ON — OFF
PHONES PCB
A2038A502C
U,C,A,E,B,S
A2038A512C
V
PHONES
TM902
SPEAKERS TERMINAL
SPEAKERS IND PCB
A2038A501D U
502D C,A
503D E,B,S
504D V
SPEAKERS TERMINAL PCB
A2018D5070 V
CHASSIS GND
T901 AM-A70T-30
AC120V 50Hz
FUSE PCB A2038A511B C,A
T901 AM-A70T-40 E
AM-A70T-50 B,S
AM-A70T-60 V
AC220V 50Hz
AC240V 50Hz
SHORT : EXCEPT V
FUSE PCB A2038A521B E,B,S
531B V
2SC2960
2SK246
2SK117
2SA1209
2SA1248
2SC2911
2SC3116
2SD612K
2SA1106
2SC2581
* | C,A | U,E,B,S,V
F3 | 1.25A 125V | T1A 250V
F4 | 1.25A 125V | T1A 250V
F5 | 1A 125V | T1A 250V
1
2
3
4
5
6
7
8

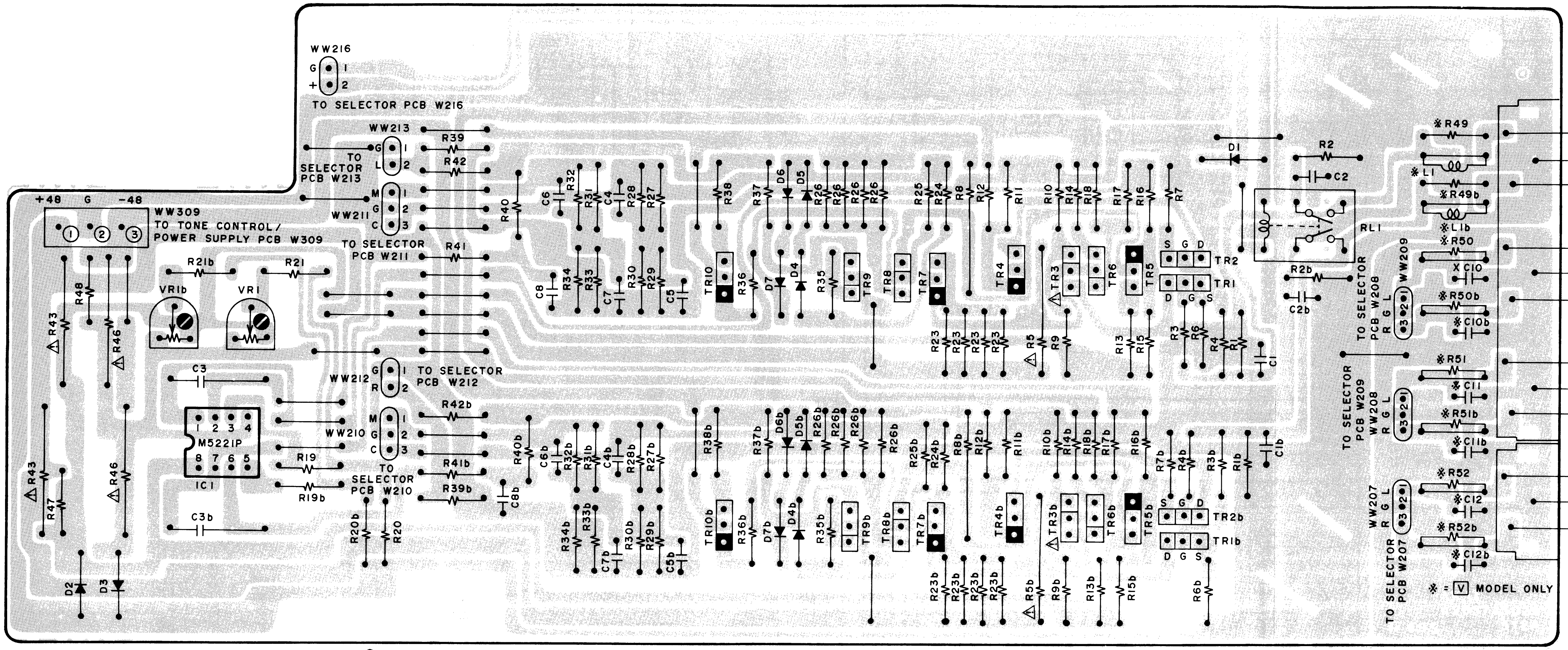
VOLTAGES ARE INDICATED AT AUX MODE
SIGNAL LINE IS INDICATED LEFT CHANNEL ONLY AT PHONO MODE

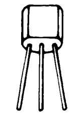
NOTES
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/4W(J)
ALL CAPACITORS IN μF 50 WV (J)

AM-A70
CONNECTION DIAGRAM
NO.2-1 851004A

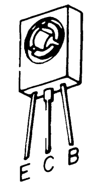
WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY.
REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ.
POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL,
NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

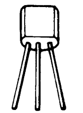

WW216
G
+
1
2
TO SELECTOR PCB W216
WW213
TO SELECTOR PCB W213
G
L
1
2
R39
R42
WW211
M
G
C
1
2
3
TO SELECTOR PCB W211
R41
+48
G
-48
WW309
TO TONE CONTROL/
POWER SUPPLY PCB W309
①
②
③
R21b
R21
VR1b
VR1
R48
R43
R46
C3
IC1
M5221P
1 2 3 4
8 7 6 5
WW212
G
R
1
2
TO SELECTOR PCB W212
R42b
WW210
M
G
C
1
2
3
TO SELECTOR PCB W210
R41b
R39b
R19
R19b
R47
C3b
D2
D3
R20b
R20
R40
C6
R32
R31
C4
R28
R27
C8
R34
R33
C7
R30
R29
C5
R38
R37
D6
D5
R26
TR10
R36
D7
D4
R35
TR9
TR8
TR7
R25
R24
R8
R12
R11
TR4
R23
R10
R14
R18
TR3
TR6
R17
R16
TR5
R7
R5
R9
R13
R15
R3
R6
R4
R1
C1
S G D
TR2
TR1
D G S
D1
R2
C2
RL1
R2b
C2b
R40b
C6b
R32b
R31b
C4b
R28b
R27b
C8b
R34b
R33b
C7b
R30b
R29b
C5b
R38b
R37b
D6b
D5b
R26b
TR10b
R36b
D7b
D4b
R35b
TR9b
TR8b
TR7b
R25b
R24b
R8b
R12b
R11b
TR4b
R23b
R10b
R14b
R18b
TR3b
TR6b
R17b
R16b
TR5b
R5b
R9b
R13b
R15b
R6b
R7b
R4b
R3b
R1b
C1b
TR2b
TR1b
※R49
※L1
※R49b
※L1b
L CH
R CH
PHONO
※R50
X C10
※R50b
※C10b
TUNER
WW209
TO SELECTOR PCB W208
WW208
R G L
③②①
TO SELECTOR PCB W209
※R51
※C11
※R51b
※C11b
CD
WW207
TO SELECTOR PCB W207
※R52
※C12
※R52b
※C12b
V·DISC
※ = V MODEL ONLY



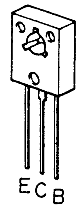
2SA992
2SC1845



2SA1220
2SC2690



2SK170
2SJ74



2SC3116
2SA1248
2SC2911
2SA1209

●|●|● = FILED EFFECT TRANSISTOR

B
●●● = NPN TRANSISTOR

B
■●● = PNP TRANSISTOR

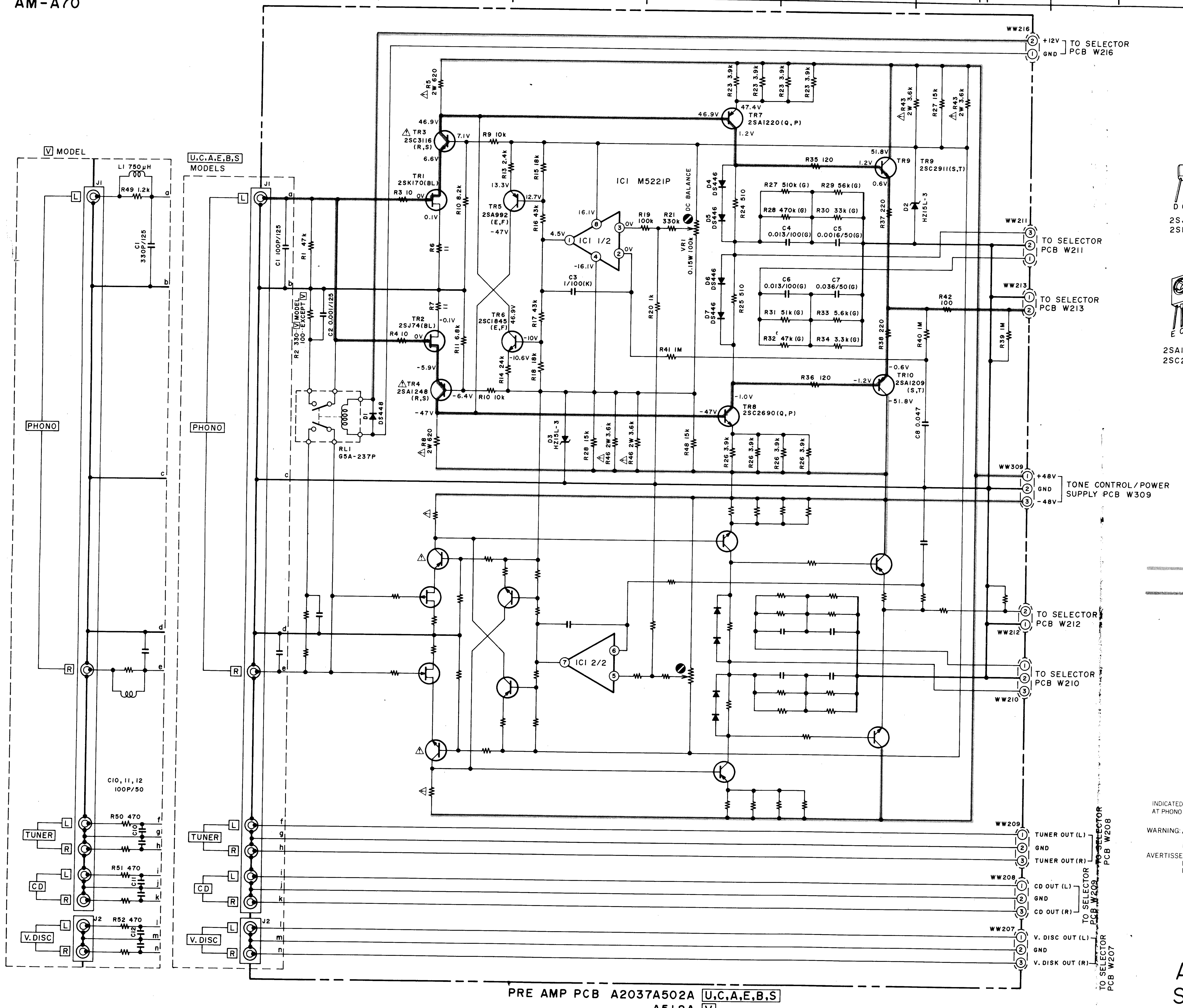
PRE AMP PCB A2037A502A U.C.A.E.B.S
512A V

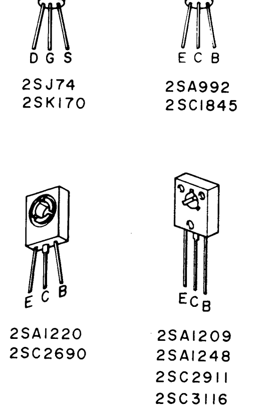
TR1,1b	2SK170(BL)
TR2,2b	2SJ74(BL)
TR3,3b	2SC3116(R,S)
TR4,4b	2SA1248(R,S)
TR5,5b	2SA992(E,F)
TR6,6b	2SC1845(E,F)
TR7,7b	2SA1220(Q,P)
TR8,8b	2SC2690(Q,P)
TR9,9b	2SC2911(S,T)
TR10,10b	2SA1209(S,T)

WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY.
REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SECURITE.
POUR MAINTENIR LE DEGRE DE SECURITE DE L'APPAREIL.
NE REMPLACER QUE DES PIECES RECOMMANDEES PAR LE FABRICANT

AM-A70


V MODEL
U.C.A.E.B.S MODELS
L1 750μH
R49 1.2k
J1
C1 330P/125
C1 100P/125
R1 47k
R2 330 V MODEL 100 EXCEPT V
C2 0.001/125
PHONO
TUNER
CD
V. DISC
J2
C10, 11, 12 100P/50
R50 470
R51 470
R52 470
TR1 2SK170(BL)
TR2 2SJ74(BL)
TR3 2SC3116 (R,S)
TR4 2SA1248 (R,S)
TR5 2SA992 (E,F)
TR6 2SC1845 (E,F)
TR7 2SA1220(Q,P)
TR8 2SC2690(Q,P)
TR9 2SC2911(S,T)
TR10 2SA1209 (S,T)
IC1 M5221P
IC1 1/2
IC1 2/2
VR1 0.15W 100k
DC BALANCE
RL1 G5A-237P
D1 DS448
D2 HZ15L-3
D3 HZ15L-3
D4 DS446
D5 DS446
D6 DS446
D7 DS446
R3 10
R4 10
R5 2W 620
R6 11
R7 11
R8 2W 620
R9 10k
R10 10k
R10 8.2k
R11 6.8k
R13 2.4k
R14 24k
R15 18k
R16 43k
R17 43k
R18 18k
R19 100k
R20 1k
R21 330k
R23 3.9k
R24 510
R25 510
R26 3.9k
R27 510k (G)
R27 15k
R28 470k (G)
R28 15k
R29 56k (G)
R30 33k (G)
R31 51k (G)
R32 47k (G)
R33 5.6k (G)
R34 3.3k (G)
R35 120
R36 120
R37 220
R38 220
R39 1M
R40 1M
R41 1M
R42 100
R43 2W 3.6k
R46 2W 3.6k
R48 15k
C3 1/100(K)
C4 0.013/100(G)
C5 0.0016/50(G)
C6 0.013/100(G)
C7 0.036/50(G)
C8 0.047
46.9V
7.1V
6.6V
0V
0.1V
13.3V
12.7V
-47V
16.1V
4.5V
-16.1V
0V
47.4V
1.2V
51.8V
0.6V
-0.1V
-5.9V
-6.4V
-10V
-10.6V
-1.0V
-1.2V
-0.6V
-51.8V
W216
+12V
GND
TO SELECTOR PCB W216
W211
TO SELECTOR PCB W211
W213
TO SELECTOR PCB W213
W309
+48V
GND
-48V
TONE CONTROL/POWER SUPPLY PCB W309
TO SELECTOR PCB W212
W212
TO SELECTOR PCB W210
W210
W209
TUNER OUT (L)
GND
TUNER OUT (R)
TO SELECTOR PCB W208
W208
CD OUT (L)
GND
CD OUT (R)
TO SELECTOR PCB W209
W207
V. DISC OUT (L)
GND
V. DISK OUT (R)
TO SELECTOR PCB W207
PRE AMP PCB A2037A502A U,C,A,E,B,S
A512A V


D G S
2SJ74
2SK170
E C B
2SA992
2SC1845
E C B
2SA1220
2SC2690
E C B
2SA1209
2SA1248
2SC2911
2SC3116

= B (POWER SUPPLY) LINE

= SIGNAL LINE

INDICATED VOLTAGES ARE MEASURED
AT PHONO (M, M) MODE.

WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/4W(J)
ALL CAPACITORS IN μF 50WV(J)

AM-A70 PRE AMP SCHEMATIC DIAGRAM

NO.2-2 851005A (A2)